



Department for
Business, Energy
& Industrial Strategy

Impacts of International Regulatory Cooperation (IRC) initiatives

Research project

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Executive Summary

Economic Insight was commissioned by the Department for Business, Energy and Industrial Strategy (BEIS) to undertake a research project exploring what economic impacts International Regulatory Cooperation (IRC) initiatives may have had on the UK economy, through a series of case studies. IRC allows countries to consider the impacts of their regulations beyond their borders, learn from the experience of international peers and develop coordinated approaches to global challenges.¹ IRC initiatives are unique and vary from informal dialogues and partnerships, to plurilateral agreements, to multilateral cooperation. This project is intended to help the UK government shape its policy strategy around trade, investment, and growth, as well as outline better IRC in the future. The research follows a call for evidence by BEIS in 2020, which looked to identify priorities for the UK's forthcoming IRC strategy.²

Overall, IRC initiatives have been successfully implemented against their objectives in the UK and we expect these to have delivered a number of positive impacts for the UK economy. These impacts include both intermediate outcomes, such as reductions in regulatory costs and the establishment of long-term agreements with other countries, and long-term economic benefits, such as improvements in productivity, growth and trade. However, through our literature review and stakeholder interviews, we found that there is limited evidence available to confirm the realised impacts of initiatives. That is, whilst positive economic benefits are expected, so far there is limited robust evidence to demonstrate benefits have arisen in practice. We expect this is for several reasons, including the inherent challenges of assessing the initiatives' impacts and their recency. For this reason, we also outline opportunities for improving the evidence base through the use of monitoring and evaluation.








Objectives and research questions

The aim of this research is to provide evidence of how IRC benefits the UK. The research will help: (i) build the case for greater IRC, following the UK's withdrawal from the European Union (EU); (ii) shape UK government policy priorities; and (iii) create a coordinated strategy across government departments and regulators on how best to implement IRC going forward. Specifically, the study examines the economic opportunities created by individual IRC initiatives that the UK currently engages with through 12 different case studies, which cover a range of different sectors and topics. The case studies are presented by sector in the table overleaf.

¹ 'Review of International Regulatory Co-operation of the United Kingdom.' OECD (2020).

² Please see: <https://www.gov.uk/government/consultations/international-regulatory-cooperation-strategy-call-for-evidence>

Table 1: Case study overview

Sector	Case study
 Aviation	Remotely Piloted Aircraft Systems (RPAS) Panel
 Wildlife	2018 London Illegal Wildlife Trade (IWT) Conference
 Finance	Global Financial Innovation Network (GFIN)
	Organisation for Economic Cooperation and Development (OECD) International VAT/GST Guidelines
	International Platform on Sustainable Finance (IPSF)
	International Organisation of Securities Commissions (IOSCO)
 Food	Codex Alimentarius Commission (CAC) and International Food Safety Authorities Network (INFOSAN)
 Energy	International Convention on Nuclear Safety
 Healthcare and safety	Health and safety standard ISO 45001
	Access Consortium, a coalition of medical regulatory authorities
	International Accreditation Forum (IAF)
 Trade	Digital Market Access Service (DMAS)

Source: Economic Insight

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Whilst the research project explores some of the hypothetical or intended impacts of the initiatives, it aims to analyse the actual realised intermediate outcomes and long-term benefits of IRC. These include:

- **Regulatory costs**, which are the costs incurred when complying with, engaging with and developing regulations. These can be incurred by governments, regulators, businesses or individuals. For example, reductions in regulatory costs can lead to economic benefits by making international trade and investment more attractive for businesses and countries.
- **Greater regulatory coherence**, which refers to improvements in the similarities of regulations between different countries. Improving regulatory alignment between jurisdictions reduces regulatory burdens for businesses, which means they can deploy resources elsewhere. This leads to economic benefits such as improved productivity and growth.
- **Improved cross-border regulatory enforcement**, which refers to improvements in the way regulations are implemented and enforced across different jurisdictions. Enhancements in regulatory enforcement between countries can lead to economic benefits such as productivity and growth, as governments and businesses incur fewer costs associated with cross-border enforcement.

The three key research questions that this study seeks to address are summarised below:

- **RQ1:** Did the IRC initiatives lead to any intermediate outcomes, such as reducing regulatory costs, achieving greater regulatory coherence, improving cross-border regulatory enforcement, or leading to the establishment of any long-term agreements with other countries? If so, how and by how much did they change?
- **RQ2:** Did the IRC initiatives lead to long-term economic benefits, such as increased trade, foreign direct investment (FDI), productivity or growth? If so, how and by how much did they change?
- **RQ3:** Are benefits 'one-off' or will they persist? Does one benefit give rise to another?

Research methodology

We carried out a desk-based review of a long list of IRC initiatives to identify the existing documentation and to shortlist the case study options. The review of existing documentation was conducted to ensure the shortlist of case studies had sufficient richness of information available to assess the realised impacts of these initiatives. The final shortlist of 12 case studies presented in Table 1 was selected to represent a range of sectors, as well as different levels of maturity of the initiatives.

To answer the research questions set out above, and develop robust case study-based evidence, we followed a three-phased approach.

- **Phase 1: Literature review.** Our approach to conducting a literature review for each case study consisted of two stages: (i) developing a systematic search strategy to identify literature which answers the specified project research questions; and (ii) conducting an in-depth review of the selected studies, as well as using this evidence to answer the research questions. Through this approach, we reviewed a total of 41 papers across the 12 case studies.
- **Phase 2: Stakeholder interviews.** Following the completion and findings of Phase 1, we conducted a series of semi-structured interviews with stakeholders of the case studies, including both 'organisers' and 'customers' of IRC initiatives. Through this, we contacted a total of 102 interview candidates and conducted 27 interviews with 43 individuals. Annex A sets out the methodology used for the interviews in more detail and Annex B presents the discussion guide that was used to conduct the interviews. The organisations that we spoke to include the Financial Conduct Authority (FCA), the Civil Aviation Authority (CAA), the British Standards Institution (BSI), the United Kingdom Accreditation Service (UKAS) and UK Sustainable Investment and Finance Association (UKSIF). We also conducted interviews with stakeholders from the OECD, as well as former senior policy advisors of the Better Regulation Executive (BRE) directorate within BEIS, to gain cross-cutting perspectives on IRC initiatives.
- **Phase 3: Results synthesis.** Finally, we synthesised the evidence collected in Phase 1 and Phase 2 in this report and outlined overarching conclusions on the economic impacts of IRC initiatives. In doing so, we set out answers to the research questions that were investigated as part of this study.

Research challenges

When deploying the aforementioned research methodologies, we faced a number of challenges in identifying the economic impacts of IRC. We found that, so far, there was little existing literature available on the impacts of IRC initiatives, particularly on the realised economic impacts of initiatives. Consistent with the literature review, the stakeholder interviews also provided limited evidence in terms of the realised impacts of initiatives.

We understand that this lack of available evidence is consistent with findings from initial research conducted by the BRE. We expect the evidence gap is partly due to some of these initiatives being too recent for any realised outcomes and benefits to have been achieved. However, this is also likely due to the inherent challenges of assessing the impacts of these initiatives, as set out below.

- Some initiatives, such as the ISO 45001 standard on health and safety, have less direct links to economic benefits. In other words, a number of different stages are required for improvements in health and safety to lead to economic benefits. In these cases, it is therefore expected to be challenging to identify the direct or indirect economic benefits arising from initiatives, due to the multitude of other stages that economic benefits are dependent on.

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- Relatedly, achieving long-term economic benefits, such as growth or FDI, is generally not the primary objective of IRC initiatives studied in this project, with some initiatives having limited connections to economic benefits. As a result, it is difficult to identify or isolate economic benefits from these initiatives, even if the logic chain is followed through. For example, the objective of the 2018 London IWT Conference is to reduce illegal wildlife trade, and so this initiative is likely to have had bigger impacts on environmental issues and crime, rather than having led to long-term economic benefits, such as increasing productivity or leading to growth. Notwithstanding this, one may expect some economic spill overs from this.
- We also note that the impacts of IRC initiatives are more difficult to evaluate from a methodological perspective than other interventions. Indeed, it is challenging to establish a clear counterfactual scenario to assess the impact of the initiatives, due to the eco-system level of these initiatives.

In addition to the challenges associated with identifying existing evidence on the impacts of IRC, we also faced some more practical research challenges. These were as follows:

- For the reasons set out above, some ‘customers’ of the initiatives were not aware of, or knew little about, the IRC initiative in question, and so we were unable to conduct useful interviews with these stakeholders.
- In addition, although interview candidates were identified, it was not always possible to conduct interviews with stakeholders due to various other constraints on their time. We note that the research project was conducted in a short time frame in order to inform on-going policy development.

Findings

In this section, we present the overall findings of the research project. We first discuss the evidence of the expected impacts of IRC, before answering the three key project research questions on the realised impacts of IRC initiatives.

Expected impacts of IRC

IRC initiatives have been successfully implemented against their objectives in the UK and we expect these to have delivered a number of positive impacts for the UK economy. These impacts include both intermediate outcomes and long-term economic benefits.

In relation to the intended intermediate outcomes, evidence shows that IRC should: (i) reduce regulatory costs, for both businesses and governments; (ii) improve regulatory coherence and cross-border regulatory enforcement between countries; and (iii) lead to the establishment of long-term agreements with other countries. The mechanisms through which these outcomes are expected to arise are set out below.

- **Regulatory costs.** By improving regulatory cooperation and standardising regulations between countries, IRC initiatives are expected to reduce regulatory costs, both at the

business- and at the country-level. At the business-level, regulatory cooperation between countries reduces: (i) information-related costs, associated with researching regulations in other countries; (ii) specification costs, of having to adapt to regulations in other countries; and (iii) conformity costs, associated with demonstrating compliance with regulations in other countries. At the country-level, regulatory cooperation reduces: (i) costs of complying with other countries' regulations; and (ii) costs for countries of researching and setting up their own regulations, as they are able to implement international regulations. However, since the UK has been actively engaging in the process of setting up international regulations through these IRC initiatives, we consider the latter mechanism for reducing country-level regulatory costs is less relevant for the UK and demonstrates the UK's role as a global leader in IRC. As an example, the Access Consortium was expected to reduce regulatory costs for both businesses and governments by harmonising regulations between member states, but it was not expected to reduce the costs associated with researching and setting up regulations for member states.

- **Regulatory coherence and cross-border regulatory enforcement.** IRC initiatives are expected to improve regulatory coherence and cross-border regulatory enforcement between countries by increasing cooperation, harmonising legislation and sharing ideas and lessons learnt between countries participating in initiatives. International standards and regulations that result from IRC initiatives will also improve regulatory coherence and enforcement between countries who implement these. For example, in the RPAS Panel case study, we found that enhanced regulatory coherence and cross-border regulatory enforcement were “central to the Panel’s purpose” and “absolutely” expected to arise, according to the current and former RPAS Panel members we interviewed.
- **Long-term agreements.** IRC initiatives are generally expected to lead to the creation of international standards and regulations in the form of long-term agreements between countries, thus demonstrating global commitments to improving the regulatory environment across various sectors. Further to this, by bringing together subject matter experts and countries to discuss regulatory issues, IRC initiatives are expected to lead to other long-term agreements on related issues. For example, the 2018 London IWT conference was expected to lead to the establishment of long-term agreements between the UK and other countries both during and after the conference – in particular, it was hoped countries and other attendees would pledge funding to reduce illegal trade and sign the conference’s London Declaration.

IRC initiatives are also expected to lead to long-term economic benefits. In particular, these initiatives are expected to increase trade links and FDI, as well as drive improvements in productivity and sectoral growth. The mechanisms through which these economic benefits are expected to arise are described below.

- **Trade and FDI.** Improving regulatory alignment between countries is expected to increase trade and FDI. In particular, by reducing costs associated with complying with regulations in other countries, both businesses and countries are more likely to engage in international trade and investment as this will be more commercially attractive. In addition, improved regulatory coherence is expected to increase demand between

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countries and open up the possibility of trade in goods and services which are aligned to international regulations. For example, in the IOSCO case study, we found that this initiative was expected to increase trade and FDI, by improving regulatory coherence between member states.

- **Productivity and growth.** IRC is expected to drive productivity improvements and sectoral growth. Improving regulatory cooperation between countries means that businesses incur fewer costs associated with regulatory compliance. This implies that businesses can deploy resources elsewhere, leading to productivity improvements and growth. For example, the GFIN initiative was expected to lead to productivity and growth, as firms would be able to divert their cost bases away from regulatory-related issues.

Realised impacts of IRC

Whilst positive impacts are expected, through our literature review and stakeholder interviews we found that, so far, there is limited evidence available in terms of the realised impacts of initiatives. Due to this lack of available evidence, we were not able to fully answer some of the project research questions (i.e. in relation to realised economic benefits). However, we present our findings on the three key research questions below.

In relation to RQ1, we found some available evidence of intermediate outcomes being realised from IRC initiatives. Our findings are as follows.

- We found ample evidence of increases in the participation in IRC initiatives globally, following their implementation. For example, the number of countries participating in the GFIN has increased. For the IAF case study, we found that there has been an increase in the number of IAF members and signatories to the Multilateral Recognition Arrangement.
- We also found evidence of long-term agreements being set up as a result of IRC initiatives. For the example, the London Declaration was signed at the 2018 London Illegal Wildlife Trade (IWT) conference. In the IOSCO case study, the initiative led to 125 out of 159 members signing a Multilateral Memorandum of Understanding (MMoU), as well as 20 members signing a supplementary Extended MMoU (EMMoU) agreement.
- In relation to regulatory costs, as well as regulatory coherence and enforcement, we found little available evidence of the realised outcomes of initiatives. For example, in the OECD International VAT/GST Guidelines case study, one interviewee explained that “it is difficult to quantify whether this has been achieved in practice” when discussing whether regulatory costs had been impacted. In the Access Consortium case study, interview participants considered that improved regulatory coherence had been achieved, but explained that they could not provide any confirmation of this as evidence was not available.
- In some case studies, we found evidence to suggest that outcomes had not yet been realised. For example, in the RPAS Panel case study, the interview participants considered that improvements in regulatory coherence and cross-border regulatory

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enforcement had not yet been achieved from the IRC initiative, as work was still ongoing.

In relation to RQ2, we found that very limited evidence was available on the realised long-term economic benefits of initiatives. As outlined in the research challenges section, we expect this is due to a number of reasons, including the inherent challenges of assessing the initiatives' impacts and their recency. We summarise the available evidence below.

- In the DMAS case study, we found evidence that the IRC initiative had increased trade. For example, one study by the Department for International Trade (DIT) found that the lifting of beef and lamb export restrictions to Japan led to an estimated £127 million increase in trade during the first five years of the tool, prior to the implementation of the UK-Japan Comprehensive Economic Partnership Agreement (CEPA).³ However, no further estimation methodology was provided so it is difficult to conclude whether £127 million can be fully attributed to this initiative.
- In the IAF case study, we found evidence that trade had increased as a result of the initiative. For example, Blind et al. (2018) undertook regression analysis using the United Nation's COMTRADE database and found that members of the IAF enjoyed increased levels of trade compared to countries who had not joined.⁴ In addition, based on previous research by the Centre for Economics and Business Research (CEBR), a report by the IAF argued that £6.1 billion of additional UK exports per year could be attributed to standards and accreditation conformity.⁵ However, the report did not attribute these benefits directly to the IRC initiative itself.
- In the IOSCO case study, we found evidence that IOSCO had resulted in liquidity improvements. Indeed, Silvers (2020) found that, as a result of IOSCO's MMoU, home shares (cross-border shares traded in local markets) experienced liquidity improvements of 6-9%, whilst host shares (cross-border shares listed in foreign markets) experienced liquidity improvements of 25-30%.⁶
- In some cases, we found that evidence of realised long-term economic benefits was difficult to relate to the IRC initiative in question. For example, in the CAC case study, one paper found that food exports had increased from \$23 billion in 1963, when the CAC was formed, to \$1,119 billion in 2013 – however, the study did not attribute this increase in trade to the IRC initiative.⁷ In the Access Consortium case study, one interviewee suggested that there were too many factors influencing trade, meaning that it was not possible to attribute any trade effects to the Access Consortium.

In relation to RQ3, evidence suggests that the impacts of IRC initiatives are not expected to be 'one-off' and are expected to persist. Indeed, nearly all interview participants that we spoke

³ 'Trade barriers removed to boost business.' DIT (2020).

⁴ 'The effects of cooperation in accreditation on international trade: Empirical evidence on ISO 9000 certifications'. Blind, Mangelsdorf and Pohlisc (2018).

⁵ 'Accreditation: Adding Value to Supply Chains'. IAF (2020).

⁶ 'Cross-border cooperation between securities regulators.' Silvers (2020).

⁷ 'Trade and Food Standards.' Food and Agriculture Organization of the United Nations and World Trade Organizations (2017).

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to considered that the impacts of the IRC initiatives would not be one-off. Some examples are provided below.

- In the OECD VAT/GST Guidelines case study, the interviewees explained that this initiative helps create a continuous revenue stream for the UK government and so, in this sense, helps deliver persistent benefits for the UK economy.
- The GFIN was expected to deliver dynamic impacts, due to increased engagement and understanding between different regulators.
- In the RPAS Panel case study, the respondents considered that the initiative enables long-term international cooperation between countries, which delivers lasting benefits.
- The interviewees from the OECD noted that "inherently, regulation is a very dynamic phenomenon" and explained that they expected the impacts of IRC initiatives to persist.

Opportunities

The importance of IRC is widely accepted. In particular, we found ample evidence of increases in the participation in IRC initiatives globally, following their implementation. Along with the UK's leading role in global rulemaking for several sectors, this strong appetite to participate in IRC initiatives globally could be a stepping stone to achieving future domestic economic gains in the UK. IRC also acts as an important lever for wider policy interventions.

However, as set out in the previous section, the evidence on the actual, tangible impacts that IRC initiatives have had on the UK economy is limited. This lack of available evidence is a global challenge that other international governments are facing, too. Following the UK's withdrawal from the EU, the responsibility for the UK's regulatory policy has returned to UK government departments and regulators. There is, therefore, an opportunity for these decision-making bodies to better consider the realised benefits of IRC and use this knowledge to both: (i) effectively include international cooperation in the UK regulatory structure; and (ii) support successful future engagement in IRC. We have identified two opportunities for improving the evidence base.

- Firstly, greater focus could be placed on establishing the evidence on the actual impacts of existing IRC initiatives on the UK economy, by embedding monitoring and evaluation practices for these initiatives. For example, for initiatives where these practices are already in place, efforts could be directed at improving the quality of monitoring and evaluation, through improved data collection.
- Secondly, when setting up future IRC initiatives, clear direction could be given on who bears the responsibility of 'tracking' the realised impacts of initiatives through the use of monitoring and evaluation.

As explained previously, there are inherent challenges in assessing the impacts of IRC initiatives, because economic benefits are generally not the objective of IRC initiatives. This means that these initiatives are somewhat far removed from direct or indirect economic benefits. Impacts of IRC initiatives are also more difficult to evaluate from a methodological

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perspective than other interventions, due to the challenges of establishing a clear counterfactual scenario.⁸ The above opportunities should be considered in light of these challenges.

⁸ BEIS has previously commissioned an exploratory study on policy evaluation methods. This is available here: <https://www.gov.uk/government/publications/alternative-policy-evaluation-frameworks-and-tools-exploratory-study>

Introduction

Economic Insight was commissioned by the Department for Business, Energy and Industrial Strategy (BEIS) to undertake a research project exploring what economic impacts International Regulatory Cooperation (IRC) initiatives may have had on the UK economy, through a series of case studies. IRC allows countries to consider the impacts of their regulations beyond their borders, learn from the experience of international peers and develop coordinated approaches to global challenges.⁹ IRC initiatives are unique and vary from informal dialogues and partnerships, to plurilateral agreements, to multilateral cooperation.

Background








Globalisation has increased the interconnectedness of countries into a global system, creating regulatory issues that countries cannot deal with effectively on their own. The Organisation for Economic Cooperation and Development (OECD) considers that countries need to cooperate with each other to tackle these issues and reach the most beneficial outcome.¹⁰ In recent years, two key factors have emerged that have created the need for the UK to develop its own international regulatory cooperation strategy, namely: (i) the UK's withdrawal from the European Union (EU); and (ii) technological advancement. The former makes it necessary for the UK to have its own independent strategy, whilst the latter has rendered acting alone ineffective.

In this context, the aim of this research is to evidence how IRC benefits the UK economy. Using this evidence, it is intended to help the UK government shape its strategy around trade, investment, and growth, as well as shape better IRC in the future. The research will also help identify good practices and considerations to be taken into account when UK government departments and regulators engage in IRC. In doing so, the study examines the economic opportunities created by individual IRC initiatives that the UK currently engages with through a series of case studies. The research explores 12 different case studies, which cover a range of different sectors and topics. The case studies are presented by sector in the table overleaf.

⁹ 'Review of International Regulatory Co-operation of the United Kingdom.' OECD (2020).

¹⁰ Please see: <https://www.oecd.org/gov/regulatory-policy/international-regulatory-cooperation-policy-brief-2018.pdf>

Table 2: Case study overview

Sector	Case study
 Aviation	Remotely Piloted Aircraft Systems (RPAS) Panel
 Wildlife	2018 London Illegal Wildlife Trade (IWT) Conference
 Finance	Global Financial Innovation Network (GFIN)
	Organisation for Economic Cooperation and Development (OECD) International VAT Guidelines
	International Platform on Sustainable Finance (IPSF)
	International Organisation of Securities Commissions (IOSCO)
 Food	Codex Alimentarius Commission (CAC) and International Food Safety Authorities Network (INFOSAN)
 Energy	International Convention on Nuclear Safety
 Healthcare and safety	Health and safety standard ISO 45001
	Access Consortium, a coalition of medical regulatory authorities
	International Accreditation Forum (IAF)
 Trade	Digital Market Access Service (DMAS)

Source: Economic Insight

Research questions

Whilst the research project explores some of the hypothetical or intended impacts of the initiatives, it aims to analyse the actual realised intermediate outcomes and long-term benefits of IRC. The three key research questions that were investigated as part of this study are set out below.

- **RQ1:** Did the IRC initiatives lead to any intermediate outcomes, such as reducing regulatory costs, achieving greater regulatory coherence, improving cross-border regulatory enforcement, or leading to the establishment of any long-term agreements with other countries? If so, how and by how much did they change?
 - Did the IRC initiatives contribute to achieving greater regulatory coherence and reducing regulatory costs? If yes, how?
 - Did the IRC initiatives lead to the improvement of cross-border regulatory enforcement outcomes between countries?
 - Did international cooperation lead to the establishment of any long-term agreements with other countries such as a Memorandum of Understanding or long-term information sharing agreements between countries?
 - Was there any evidence that engaging internationally led to improved policy outcomes such as benefits for citizens and or business?
- **RQ2:** Did the IRC initiatives lead to long-term economic benefits, such as increased trade, foreign direct investment (FDI), productivity or growth? If so, how and by how much did they change?
 - Did sectoral (goods and services) trade links between the UK and the countries in scope of the IRC initiatives intensify? And if yes, how much and what was the IRC initiatives' contribution?
 - Did sectoral FDI links between the UK and the countries in scope of the IRC initiatives intensify? And if yes, validate the impact of the IRC initiatives' contribution?
 - Did the IRC initiatives contribute to the growth of the sector? How did it contribute (e.g. did they contribute to an increase of competition pressures?), how much (measured by GVA, investment and employment), and where in the UK?
 - Did the IRC initiatives contribute to, or facilitate, improvements in productivity? If so, how?
- **RQ3:** Are benefits 'one-off' or will they persist? Does one benefit give rise to another?

Method

We carried out a desk-based review of a long list of IRC initiatives, to identify the existing documentation and to shortlist the case study options. The review of existing documentation was conducted to ensure the shortlist of case studies had sufficient richness of information available to assess the realised impacts of these initiatives. The final shortlist of 12 case studies presented in Table 2 was selected to represent a range of sectors, as well as different levels of maturity of the initiatives.

To answer the research questions set out above, and develop robust case study-based evidence, we followed a three-phase approach.

- Phase 1: Literature review.** Our approach to conducting a literature review for each case study consisted of two stages: (i) developing a systematic search strategy to identify literature which answers the specified project research questions; and (ii) conducting an in-depth review of the selected studies, as well as using this evidence to answer the research questions. Through this approach, we identified a total of 41 papers for review across the 12 case studies. The methodology we employed is set out in more detail in Annex C and the complete literature review by case study is available in Annex D.
- Phase 2: Stakeholder interviews.** Following the completion of Phase 1, we conducted a series of semi-structured interviews with stakeholders of the case studies, including both ‘organisers’ and ‘customers’ of IRC initiatives. We also conducted interviews with stakeholders who provided cross-cutting perspectives on IRC initiatives. Through this, we contacted a total of 102 interview candidates and conducted 27 interviews with 43 individuals. Annex A sets out the methodology used for the interviews in more detail and Annex B presents the discussion guide that was used to conduct the interviews.
- Phase 3: Synthesise results.** Finally, we synthesised the evidence collected in Phase 1 and Phase 2 in this report and outlined overarching conclusions on the economic impacts of IRC initiatives. In doing so, we set out answers to the research questions that were investigated as part of this study.

The table below sets out the list of organisations that we interviewed by case study. We note that some organisations wished to remain anonymous and so have not been named in the table.

Table 3: List of organisations interviewed

Case study	Organisation	Type of organisation
RPAS Panel	Civil Aviation Authority (CAA)	Regulator
	Blue Bear Systems Research	Company

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	Altitude Angel	Company
2018 London IWT Conference	Department for the Environment, Food and Rural Affairs (Defra)	Government department
	University of Northumbria	Academic institution
GFIN	Financial Conduct Authority (FCA)	Regulator
OECD International VAT/GST Guidelines	Her Majesty's Treasury (HMT)	Government department
	Her Majesty's Revenue and Customs (HMRC)	Government department
IPSF	UK Sustainable Investment and Finance Association (UKSIF)	Membership body
IOSCO	FCA	Regulator
	UK Finance	Trade association
CAC and INFOSAN	Food Standards Agency (FSA)	Non-ministerial government department
International Convention on Nuclear Safety	Office for Nuclear Regulation (ONR)	Regulator
Standard ISO 45001	Health and Safety Executive (HSE)	Regulator
	Institution of Occupational Safety and Health (IOSH)	Membership body
	British Standards Institution (BSI)	Standards body
Access Consortium	Association of the British Pharmaceutical Industry (ABPI)	Trade association

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	Faculty of Pharmaceutical Medicine (FPM)	Membership body
	Eisai	Company
	British Generic Manufacturers Association (BGMA)	Trade association
IAF	United Kingdom Accreditation Service (UKAS)	Accreditation body
	Association of British Certification Bodies (ABCB)	Trade association
	Independent International Organisation for Certification (IIOC)	Trade association
DMAS	Department for International Trade (DIT)	Government department

Source: Economic Insight

Report structure

We first present a Chapter for each of the case studies outlined in Table 2, which presents our findings on the intended and realised impacts of the IRC initiative. Based on the evidence developed in these Chapters, we then conduct a ‘thematic review’ of the case studies and draw overarching conclusions to answer the specific research questions.

Case Study: RPAS Panel

The Remotely Piloted Aircraft Systems (RPAS) Panel aims to facilitate safe, secure and efficient integration of remotely piloted aircraft into non-segregated airspace and aerodromes. Overall, we found some evidence of realised intermediate outcomes arising from this IRC initiative – in particular, through the establishment of long-term agreements and the assistance in forming global networks of experts in the field. However, evidence of long-term economic benefits is yet to materialise and we suspect this is because the IRC initiative is relatively recent. We anticipate these benefits to manifest in the years to come as the sector grows and develops.

Overview

RPAS encompass both smaller aircraft, such as civilian drones, as well as larger aircraft, for example those used for military operations or government research. RPAS is a rapidly evolving field and standards and regulations are needed to help both: (i) facilitate the integration of RPAS into the airspace; and (ii) maintain existing safety levels. The RPAS Panel was set up by the International Civil Aviation Organisation (ICAO) in 2014, as a technical panel to help coordinate and develop international regulations. Since forming, the RPAS Panel has published the RPAS Manual in 2015 and is currently developing Standards and Recommended Practices (SARPs) for RPAS.¹¹ The overarching objective of this IRC initiative is: “to facilitate a safe, secure and efficient integration of remotely piloted aircraft (RPA) into non-segregated airspace and aerodromes”.¹²

The RPAS Panel is composed of experts nominated by member states (e.g. Australia, United States, and Russia) and international organisations (e.g. the Civil Air Navigation Services Organisation, the European Union Aviation Safety Agency, and the International Air Transport Association). The Civil Aviation Authority (CAA) has been part of the RPAS Panel since 2014 and provides subject matter experts to several working groups of the RPAS Panel across various operations. The CAA was elected Vice Chair of the Panel and, through this, has developed a methodology for holding working groups to account.

In the subsequent sections, we present our findings from the literature review and interviews on: (i) the intended outcomes and benefits of the RPAS Panel; (ii) the realised intermediate outcomes of this IRC initiative; and (iii) realised long-term economic benefits of the initiative. To inform this case study, we conducted interviews with the CAA, Blue Bear Systems Research and Altitude Angel. The interview participants included a former RPAS Panel chair, as well as previous and current RPAS Panel members.

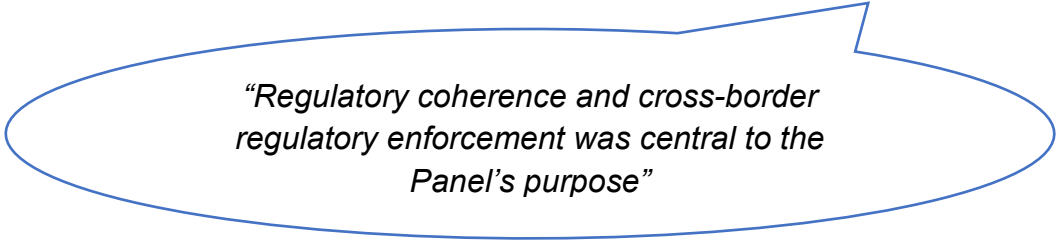
¹¹ Please see: <https://www.icao.int/Newsroom/Pages/ICAO-Council-makes-progress-on-new-remotely-piloted-aircraft-system-RPAS-standards.aspx>

¹² Please see: [https://www.icao.int/safety/UA/Pages/Remotely-Piloted-Aircraft-Systems-Panel-\(RPASP\).aspx](https://www.icao.int/safety/UA/Pages/Remotely-Piloted-Aircraft-Systems-Panel-(RPASP).aspx)

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of the RPAS Panel are as follows.

- **Regulatory costs.** The interview participants considered that the RPAS Panel was expected to reduce regulatory costs for both businesses and countries. These regulatory costs refer to costs for businesses associated with researching and familiarising oneself with foreign regulation, as well as costs to regulators as a result of researching and implementing their own regulations. The interview participants explained that standardising regulation across member states reduces costs associated with regulatory engagement. The expectation that regulatory costs would reduce for countries was also confirmed in the literature review. In particular, Clarke and Moses (2014) argued that, by waiting for ICAO and the RPAS Panel to provide international regulations on drones, countries do not have to incur costs associated with researching and implementing their own regulations.¹³ Instead, countries can use the ICAO and RPAS Panel recommendations and regulations as a starting point for their own national regulations. However, we expect that this will not be the case for the UK, since it has been actively engaging in the process of setting up international regulations, through the CAA's Vice Chair position and through the CAA providing subject matter experts to the RPAS Panel. Indeed, one interview participant noted that they expected the CAA's costs to have increased due to the IRC initiative, as a result of the costs associated with being Vice Chair and providing subject matter experts. However, in the long-run, we anticipate that the net costs to the CAA will fall as the benefits of the Panel are realised. Through a review of existing regulations of civilian drones, the authors found that most countries do not have standards on drone operations as the industry is still in its infancy, and on this basis, they concluded that countries may be waiting for ICAO to provide international regulations before adopting their own regulations on drones.
- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees thought that the RPAS Panel was expected to improve regulatory coherence and cross-border regulatory enforcement between the UK and other countries in scope of the IRC initiative. A current RPAS Panel member noted that this was "central to the Panel's purpose", whilst a former Panel member stated that this was "absolutely" one of the intended aims of the initiative.



"Regulatory coherence and cross-border regulatory enforcement was central to the Panel's purpose"

¹³ 'The regulation of civilian drones' impacts on public safety'. Clarke and Moses (2014).

Impacts of International Regulatory Cooperation (IRC) initiatives

- **Long-term agreements.** All interviewees considered that the RPAS Panel was expected to lead to the establishment of long-term agreements between the UK and other countries. One respondent expected international standardising agreements to materialise, too.

Below, we present evidence of the intended long-term economic benefits of the RPAS Panel.

- **Trade and foreign direct investment (FDI).** The aviation sector makes a major contribution to the UK economy with FDI valued at £1.17 trillion in 2018. The interview participants expected this number to increase further, and trade to rise, too, as a result of the work of the RPAS Panel.¹⁴ In particular, one respondent explained that broader links and regulatory alignment between the UK and other countries means that work does not have to be duplicated by each side to comply with each other's standards. This opens up the RPAS market and creates opportunities to increase trade and FDI. The current RPAS Panel member stated that increased trade and FDI might have been an assumed outcome of the IRC initiative, but that the Panel was mostly set up to address safety concerns across borders. They further noted that the IRC initiative aimed to discourage other countries from taking a more lenient safety route. In this sense, they considered that the IRC initiative may create a technical barrier to trade for these countries, as Panel member states would not trade with them if their RPAS were not compliant with international safety standards. Another respondent stated that it was hoped the RPAS Panel would lead to countries turning to the UK for help and support, which would be expected to bring international business to the UK.
- **Productivity and growth.** All interviewees agreed that the IRC initiative should enable productivity increases and growth in the sector. One respondent explained that having regulations recognised and respected in other countries means that resources and cost bases that would otherwise be working on such matters can be deployed elsewhere. Therefore, more can be achieved with the same resources and costs. Another interviewee explained that streamlining regulations should help the industry grow.

In the next sections, we discuss whether these intended outcomes and benefits have been realised in practice, and how well evidenced and certain they are.

Realised intermediate outcomes

We present our findings on the realised outcomes of the initiative below.

- **Regulatory costs.** We found no evidence to support regulatory costs being impacted by this IRC initiative. However, as set out above, the interview participants expected that these costs would reduce in the future.
- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees considered that improvements in regulatory coherence and cross-border regulatory enforcement have not yet been realised from the IRC initiative. They were not aware of

¹⁴ Please see: <https://www.iata.org/en/iata-repository/publications/economic-reports/united-kingdom--value-of-aviation/>

any evidence showing this yet and noted that work was still on-going. Therefore, these intermediate outcomes are expected in the future.

- **Long-term agreements.** The interviewees agreed that the RPAS Panel has led to the establishment of long-term agreements between the UK and other countries. Examples provided by the respondents included: (i) the SARPs adopted by ICAO¹⁵; and (ii) the concept of operations (CONOPS) for RPAS¹⁶. However, the former Panel chair noted that there were further opportunities for the UK to develop bilateral agreements and working arrangements, particularly following its withdrawal from the European aviation safety agency regulatory framework.
- **Uptake of the IRC initiative.** Evidence shows that the uptake of the IRC initiative has increased. Indeed, one respondent stated that the number of countries participating in the IRC initiative had increased from 34 members in 2015 to 46 members in 2021. The current RPAS Panel member stated that participation in the RPAS Panel is global, with players including Canada, the USA and China, and that there are high expectations and great opportunities for future uptake – particularly within underdeveloped regions, such as those Africa. The World Bank illustrates this with an example from the town of Mwanza, a topographically challenging region of Tanzania.¹⁷ In that region, RPAS would be the most effective way for carrying laboratory samples, lifesaving items and blood to selected destinations, such as from the mainland to distant islands.
- **Global network of industry experts.** Two interviewees also noted a more general outcome of the initiative, which was the creation of a global network of industry experts. The RPAS Panel provided the platform for experts from different countries and organisations to engage and build professional relationships with each other. This resulted in the development of an informal network of experts, which facilitates information sharing across borders and organisations. The former Panel chair explained that engaging in the international community involves a network of like-minded people trying to solve environmental, technological and other research problems. They considered that this brought together different skills, knowledge and capabilities, which lead to further opportunities to work together internationally, outside of the regulatory domain. The former chairperson also argued that the UK's leadership role in the RPAS Panel would help the UK become a thought and implementation leader, to influence the rest of the world.

In summary, there is some evidence of realised outcomes arising from the RPAS Panel. In particular, this is evidenced through the long-term agreements that have been set up with other countries and through the increase in uptake of the IRC initiative. However, the former RPAS Panel chairperson considered that the outcomes in the RPAS industry were difficult to relate to the initiative. This is because, from their perspective, the IRC initiative is in the background and hidden behind the CAA's work. Therefore, it is difficult to attribute outcomes to RPAS specifically. There also appears to be scope for further development of the realised outcomes

¹⁵ Please see: <https://www.icao.int/Newsroom/Pages/ICAO-Council-makes-progress-on-new-remotely-piloted-aircraft-system-RPAS-standards.aspx>

¹⁶ Please see: <https://www.icao.int/safety/UA/Documents/ICAO%20RPAS%20CONOPS.pdf>

¹⁷ Please see: <https://blogs.worldbank.org/transport/improving-transport-and-connectivity-africa-can-drones-be-part-solution>

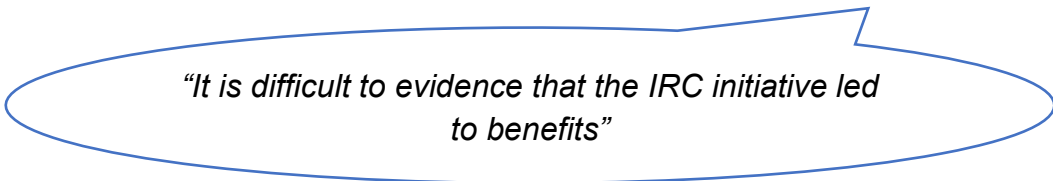
of the RPAS Panel – for example, there are opportunities for developing further long-term agreements and opportunities for uptake of the IRC initiative in more regions of the world, such as Africa.

Realised long-term benefits

Here, we discuss evidence of the realised long-term economic benefits of the IRC initiative.

- **Trade and FDI.** The respondents did not provide strong views on whether the RPAS Panel has affected trade and FDI. The current RPAS Panel member considered that trade and investment had increased, but that this was due to the sector developing, rather than due to the IRC initiative.
- **Productivity and growth.** The respondents could not point to any evidence of productivity and growth being impacted by the RPAS Panel. One respondent, involved in the manufacturing of RPAS products, considered that this was still on-going, as the IRC initiative was still relatively recent.

Therefore, we found no evidence of any long-term economic benefits being realised by the RPAS Panel. Indeed, the former RPAS Panel chair noted that it was difficult to evidence that the IRC initiative had led to benefits. As outlined previously, a number of long-term benefits were expected from the initiative.



“It is difficult to evidence that the IRC initiative led to benefits”

Overall, the interviewees considered that the impacts of the RPAS Panel would persist and were not ‘one-off’. They explained that the Panel creates an international regulatory framework which enables lasting international agreements to be set up between countries. The former Panel chair explained that making the IRC initiative more visible would encourage other countries to get involved, therefore providing further opportunities for benefits to arise.

Case Study: 2018 London IWT Conference

The 2018 London Illegal Wildlife Trade (IWT) Conference aimed to take coordinated global action to tackle the illegal wildlife trade. Overall, the conference was successful in building long-term agreements, illustrated by the 65 countries who signed the London Declaration. Based on the available evidence, we were not able to identify long-term economic benefits as of yet. We expect this to be partially due to the IRC initiative still being relatively new, and the initiative being geared more towards tackling the illegal wildlife trade, rather than leading to long-term benefits for the UK economy.

Overview

IWT not only threatens endangered species, but also establishes trafficking networks that can be used by organised criminals for money-laundering, weapons, drugs and human trafficking.¹⁸ It is estimated to be the fourth largest type of transnational organised crime and is worth up to £17 billion per year. International cooperation on IWT should help to address the significant detrimental economic, environmental, security and social impacts that the trade presents.

In October 2018, the UK government held the largest global conference to date on IWT in London. The Department for the Environment, Food and Rural Affairs (Defra) led the delivery of the conference, with help of the Foreign and Commonwealth Office (FCO) and the Department for International Development (DFID). The conference was attended by approximately 1,300 delegates, from over 70 countries and over 400 charities, conservation groups and businesses.¹⁹ The overarching objective of this IRC initiative was to take coordinated global action to tackle IWT. The conference focussed on three key themes: (i) tackling IWT as a serious organised crime; (ii) building coalitions; and (iii) closing markets for IWT.²⁰

In the subsequent sections, we present our findings from the literature review and interviews for this case study. We first discuss the intended impacts of the IWT conference, before exploring the realised intermediate outcomes and long-term economic benefits of this IRC initiative. To inform this case study, we conducted interviews with Defra and an academic who specialises in this field. One of the interviewees also attended the 2018 London IWT conference.

¹⁸ Please see: <https://www.gov.uk/government/topical-events/london-conference-on-the-illegal-wildlife-trade-2018/about>

¹⁹ Please see: <https://questions-statements.parliament.uk/written-questions/detail/2019-03-18/233598>

²⁰ Please see: <https://www.gov.uk/government/topical-events/london-conference-on-the-illegal-wildlife-trade-2018/about>

Intended outcomes and benefits

Below, we present evidence of the intended intermediate outcomes of the London IWT conference.

- **Regulatory costs.** The interviewees explained that IWT does not have a regulatory regime or a legal framework, and so they did not consider that the conference was intended to reduce regulatory costs.
- **Regulatory coherence and cross-border regulatory enforcement.** The interview participants did not consider that this initiative was expected to improve regulatory coherence and cross-border regulatory enforcement, since IWT does not have a regulatory regime. However, one interviewee explained that harmonisation of legislation and transboundary cooperation to reduce IWT was an intended outcome of the conference. Indeed, Masse et al (2018) explained that the standardisation of laws and penalties between countries, such as poaching penalties and trade bans on wildlife products, is one mechanism to reduce IWT.²¹
- **Long-term agreements.** The interviewees confirmed that this was one of the aims of the conference and explained that it was hoped countries and other attendees would pledge funding to reduce IWT and sign the conference's London Declaration. In particular, the IRC initiative was intended to lead to the establishment of long-term agreements both during and following the conference.
- **Draw attention to the issue of IWT.** The interview participants considered that another intended outcome of the conference was to draw attention to the issue of IWT.

Our findings on the intended long-term economic benefits of the conference are as follows.

- **Trade and foreign direct investment (FDI).** The interview participants considered that the conference was not intended to increase sectoral trade links and FDI. However, one interviewee noted that the conference was intended to prevent IWT, which would have the effect of reducing illegal cross-border trade and illicit financial flows relating to IWT.
- **Productivity and growth.** The interviewees did not consider that increases in productivity or growth were intended outcomes of the 2018 London IWT conference.

In the next sections, we discuss whether these intended outcomes and benefits have been realised in practice, and how well evidenced and certain these outcomes and benefits are.

Realised intermediate outcomes

In this section, we discuss evidence of the realised intermediate outcomes of the IRC initiative, based on our findings from the literature review and stakeholder interviews.

²¹ 'Conservation and crime convergence? Situating the 2018 London Illegal Wildlife Trade Conference.' Masse et al (2018).

- **Regulatory costs.** Regulatory costs do not appear to have been impacted by this IRC initiative. As explained previously, a reduction in regulatory costs was not an intended outcome of the conference.
- **Regulatory coherence and cross-border regulatory enforcement.** The interview participants explained that high-level commitments were made to align future legislation and improve cross-border enforcement during the conference. However, we did not find any evidence of these being achieved following the conference. One interviewee explained that the Kavango Zambezi Transfrontier Conservation Area (KAZA) holds 'harmonisation of legislation' workshops and considered that these could be linked back to the commitments made during the conference.
- **Long-term agreements.** The interviewees considered that the UK had successfully rallied other countries to pledge funding to tackle IWT and sign the London Declaration. Indeed, evidence in the literature review shows that several commitments were made during the conference²² and that 65 countries signed the London Declaration²³. One interviewee noted that the London Declaration is “the most ambitious document on IWT”. The commitments made by the UK are summarised in the table overleaf.

“The London Declaration is the most ambitious document on illegal wildlife trade”

According to the interviewees, another long-term agreement that resulted from the London Conference was a commitment to support Latin American conferences. During the London Conference, it was announced that Peru would host the first regional conference in Latin America focussed on IWT, with £50,000 of UK funding support.²⁴ The Peru conference was then held in 2019 and led to the signing of the Lima Declaration, followed by another regional conference in Colombia. The interviewees also noted the establishment of a 'financial taskforce', with the objective of minimising financial crime. Evidence shows that this taskforce was subsequently launched and initially comprised of representatives from 30 global financial institutions, including HSBC and RBS, as well as agencies and regulatory bodies, such as TRAFFIC and RUSI.²⁵

²² Please see: <https://www.gov.uk/government/publications/declaration-london-conference-on-the-illegal-wildlife-trade-2018/london-conference-on-the-illegal-wildlife-trade-october-2018-declaration-annex-english-only>

²³ Please see: <https://www.gov.uk/government/publications/declaration-london-conference-on-the-illegal-wildlife-trade-2018/london-conference-on-the-illegal-wildlife-trade-october-2018-declaration>

²⁴ Please see: <https://deframedia.blog.gov.uk/2018/10/15/iwt-conference-more-than-50-countries-adopt-london-2018-declaration/>

²⁵ Please see: <https://www.gov.uk/government/news/uk-aid-to-crack-down-on-criminal-gangs-driving-the-illegal-wildlife-trade>

Table 4: UK government conference commitments

Commitments made by the UK government during the 2018 London IWT Conference.
<ul style="list-style-type: none"> • £35 million to protect critical forest habitats and species threatened by extinction, including the chimpanzee, gorilla, orangutan and tiger.
<ul style="list-style-type: none"> • £50,000 to support in-country projects which complement the work of the new British military counter-poaching taskforce.
<ul style="list-style-type: none"> • £50,000 for a new WILDLABS Tech Hub, to bring together technology companies and conservation organisations to provide innovative solutions to fight ITW.
<ul style="list-style-type: none"> • Up to £40,000, as part of a partnership with Tale2Tail and WWF, to fund education packs in multiple languages to help children understand the key issues in the illegal wildlife trade.
<ul style="list-style-type: none"> • Plans to establish a new global consortium of demand reduction and behaviour change specialists with local area insight to inform future working.

Source: Please see: <https://deframedia.blog.gov.uk/2018/10/15/iwt-conference-more-than-50-countries-adopt-london-2018-declaration/>

- **Draw attention to the issue of IWT.** The interview participants agreed that the conference had succeeded in drawing attention to the issue of IWT. Indeed, one interviewee considered that the conference was a “catalyst” for this. For example, they noted that Hong Kong changed its legislation following the conference to recognise IWT as a serious and organised crime.

In summary, there is some evidence of realised outcomes arising from the London 2018 IWT conference. In particular, this is evidenced by the numerous long-term agreements that were announced during the conference. However, the outcomes following the conference are less well evidenced. Indeed, one interview participant noted that the impacts of the long-term agreements announced at the conference, such as the declaration and the financial taskforce, were unclear. Additionally, it is unclear whether the high-level commitments made during the conference to align legislation and improve cross-border enforcement were realised in practice. When analysing the achievements of three previous IWT conferences compared to their aims, including the 2018 London Conference, one paper found that very little evidence was available on the realised impacts of these conferences. Where this was available, the paper found that it was not consistently reported, which made drawing conclusions difficult.²⁶

²⁶ ‘More Than Words: Are Commitments To Tackle Illegal Wildlife Trade Being Met?’ IIED and WWF (2019).

Realised long-term benefits

Here, we discuss evidence of the realised long-term economic benefits of the IRC initiative.

- **Trade and FDI.** The interviewees did not provide strong views on whether the IRC initiative has affected trade and FDI. One respondent noted that China announced their ban on the ivory trade during the conference. This was particularly promising as China was one of the countries with the largest demand for ivory. Therefore, their ban should have the effect of dampening this demand. However, the interview participants could not point to any evidence that this had been realised.
- **Productivity and growth.** The interview respondents could not point to any evidence of productivity and growth being impacted by the 2018 London IWT conference. As set out above, the interviewees did not consider that increases in productivity or growth were intended outcomes of the conference.

Therefore, there is currently little to no evidence of any long-term economic benefits being realised by the 2018 conference. However, as outlined previously, except for reducing IWT, this initiative was not expected to lead to long-term economic benefits.

Overall, the interviewees considered that the impacts of this IRC initiative were not one-off and would persist. For example, they noted that the money that had been pledged at the conference has continued to fund projects, such as the IWT Challenge Fund, through which UK aid has supported 27 projects since 2018.²⁷ They also considered that the persistent impacts of this initiative were evidenced through the commitments made in the London Declaration, as well as the financial taskforce still in operation today.

²⁷ Please see: <https://www.gov.uk/government/collections/illegal-wildlife-trade-iwt-challenge-fund>

Case Study: GFIN

The Global Financial Innovation Network (GFIN) provides a framework for firms and regulators to collaborate in order to help incorporate new technology into the financial industry. Overall, we found evidence of realised intermediate outcomes arising from this initiative – in particular: (i) regulatory costs have reduced; (ii) there has been improved regulatory coherence and cross-border regulatory enforcement; (iii) long-term agreements have been established; (iv) wider economic outcomes have been realised; (v) the uptake of the IRC initiative has increased; and (vi) the FCA has continued to be a global leader in financial services innovation. Since the initiative is relatively recent, further intermediate outcomes and long-term economic benefits may be realised in future.

Overview

Regulatory sandboxes are mechanisms by which businesses are able to test their innovative ideas, under a regulator's supervision but without standard regulatory rules. The UK's Financial Conduct Authority (FCA) was the first financial services regulator globally to launch its regulatory sandbox in 2016 and it has become the benchmark globally.²⁸ The GFIN is an international network of financial regulators and related organisations committed to supporting financial innovation in the best interests of consumers. The GFIN was launched in 2019 and developed by the FCA. It goes beyond the idea of a regulatory sandbox, and attempts to emulate domestic success within the FCA's regulatory sandbox in a global context. The GFIN aims to create a framework for cooperation between financial services regulators on innovation-related topics, sharing different experiences and approaches. In doing so, the GFIN provides a network for: (i) regulators to collaborate and share experiences; (ii) collaboration between regulators and businesses in regulatory technology (RegTech) and supervisory technology (SupTech), which refer to technologies adopted to help overcome regulatory challenges in financial services; and (iii) firms that want to test their financial innovation in a cross-border context. The overarching objective of the GFIN is: "to provide a more efficient way for innovative firms to interact with regulators, helping them navigate between countries as they look to scale new ideas".²⁹

The members of the GFIN has grown to over 70 financial regulators and related organisations from across the globe, including for instance the Dubai Financial Services Authority (DFSA), the Securities and Exchange Commission (SEC) of the United States and the Monetary Authority of Singapore (MAS). Since launching the GFIN, the FCA has both provided Secretariat for the GFIN and chaired two major GFIN workstreams: (i) cross-border testing; and (ii) RegTech and SupTech research.

²⁸ Please see: <https://www.fca.org.uk/firms/innovation/regulatory-sandbox>

²⁹ Please see: <https://www.fca.org.uk/firms/innovation/global-financial-innovation-network>

In the subsequent sections, we present our findings from the literature review and interviews on: (i) the intended outcomes and benefits the GFIN; (ii) the realised intermediate outcomes of this IRC initiative; and (iii) the realised long-term economic benefits of the initiative. To inform this case study, we conducted interviews with the FCA and with an anonymous interviewee.

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of the GFIN are as follows.

- **Regulatory costs.** The interview participants considered that the GFIN was expected to reduce regulatory costs for businesses, but noted that this was not the initiative's primary objective. The literature review confirmed that the GFIN was expected to reduce regulatory costs for businesses. For example, a report by FCA explained that the GFIN helps to provide regulatory support to firms, which should help to reduce regulatory costs for businesses.³⁰
- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees considered that improved regulatory coherence, through a global network of cooperation and collaboration, was an expected outcome of the GFIN, but that improved cross-border regulatory enforcement was not. They explained that an intention of the GFIN was for regulators to be able to share information and thus improve coherence across different markets and jurisdictions. Additionally, they argued that the FCA's role in spearheading the GFIN provides an opportunity for the UK to influence the evolution of international approaches and standards in financial services innovation. The interviewees also explained that the GFIN provides a two-way platform for members to engage with one another on regulatory issues, and thus the UK benefits by gaining input from other regulators and membership organisations, due to this pooling of resources and ideas. This was confirmed in the literature review. For example, Smoleńska et al (2020) explained that the GFIN aims to improve regulatory coherence, with more knowledge pooling between regulators, greater joint work on RegTech and the creation of a cross-border environment for product trials.³¹ Parenti (2020) argued that the GFIN could result in more regulatory coherence, by encouraging regulatory-knowledge sharing across jurisdictions.³²
- **Long-term agreements.** The interview participants considered that the GFIN was expected to lead to the establishment of long-term agreements between the UK and other countries. They explained that these were expected because GFIN members are required to collaborate with each other on issues that the GFIN wants to take forward.

Below, we present evidence of the intended long-term economic benefits of the GFIN.

- **Trade and foreign direct investment (FDI).** The interview participants expected the GFIN to increase trade and FDI between the UK and other countries, but noted that this

³⁰ 'GFIN one year on report.' GFIN (2019).

³¹ 'The impacts of technological innovation on regulatory structure: Fintech in post-crisis Europe.' Smoleńska et al (2020).

³² 'Regulatory Sandboxes and Innovation Hubs for FinTech.' Parenti (2020).

was not the intended benefit of the initiative. They explained that the GFIN provides a platform for targeted cooperation and so, as it evolves, it may allow firms to reach international markets at accelerated pace, such as via cross-border testing in multiple jurisdictions. In addition, the effectiveness of bilateral cooperation could be improved as a result of increased engagement in the GFIN. The interviewees explained that these two factors can help to open up greater export opportunities for UK firms, in addition to increasing the appeal of the UK as a global destination, thus attracting FDI to the UK. Furthermore, the interviewees explained that the GFIN membership, and the UK's leading role in it, can provide benefits in several areas, including: (i) exports, as it facilitates the scaling of UK firms into new markets; and (ii) investment and FDI, as it promotes the UK as an investment destination and a launchpad for global growth.

- **Productivity and growth.** The interviewees expected the GFIN to contribute to productivity increases and growth. In particular, one interviewee explained that, if the GFIN helped improve financial services regulation, firms would be able to divert their cost bases away from regulatory-related issues towards innovation and their day-to-day operations, thereby improving productivity and growth. This was confirmed in the literature review, where we found evidence that, by increasing innovation amongst firms, the GFIN was expected to lead to improved productivity and growth. For example, Chen (2019) argued that sandboxes (such as the GFIN) provide firms with greater visibility of the regulatory risks posed by product innovation, which encourages greater innovation.³³ Chen also explained that the GFIN should help businesses make more informed choices about market entry and exit, which could lead to growth of the sector. Smoleńska et al (2020) noted that the GFIN provides businesses with the ability to conduct testing on real customers, whilst operating under reduced regulatory constraints, but with guidance from regulators.³⁴ Indeed, one interviewee explained that, when businesses are testing new products on customers, the FCA closely oversees the development and implementation of the tests, working alongside firms to agree bespoke consumer safeguards and ensuring the domestic regulatory approach is used to shape the global approach, to make this less challenging for firms. Therefore, these testing opportunities should help firms improve productivity and encourage new entry into the market, whilst also not posing increased risks to consumers.

In the next sections, we discuss whether these intended outcomes and benefits have been realised, and how well evidenced and certain the realised outcomes and benefits are.

Realised intermediate outcomes

In this section, we present evidence of realised intermediate outcomes of the GFIN.

- **Regulatory costs.** Evidence from the interviews suggests that regulatory costs have reduced as a result of the GFIN. Indeed, one interviewee considered that the cross-

³³ 'Regulatory Sandboxes in the UK and Singapore: A Preliminary Survey.' Chen (2019).

³⁴ 'The impacts of technological innovation on regulatory structure: Fintech in post-crisis Europe.' Smoleńska et al (2020).

border testing workstream of the GFIN helped reduce regulatory costs for businesses and regulators by providing: (i) a set of frequently asked questions for firms with information clearly laid out on the application process for cross-border testing; (ii) a table clearly setting out the regulatory activities undertaken by each of the member organisations of the GFIN compendium which provides firms with easily accessible information on cross-border testing practices by each member state; and (iii) a bespoke application form that businesses can use and is suitable for use in all jurisdictions, and agreed by all regulators that are involved in the cross-border testing workstream. They also considered that, as a result of the improved regulatory collaboration in the RegTech and SupTech workstreams, it is easier for firms to comply with, and regulators to manage, regulatory requirements.

- **Regulatory coherence and cross-border regulatory enforcement.** We found evidence that the GFIN has led to improvements in regulatory coherence. Indeed, one interviewee considered that the GFIN, and also more specifically the RegTech and SupTech workstreams, have improved collaboration and knowledge exchange between regulators and businesses. This had led to greater insight available on global financial innovation for both firms and global bodies (e.g. World Bank), for instance during the pandemic. For example, a report by the Cambridge Centre for Alternative Finance (CCAF), which looked into how financial regulators were responding to COVID-19 in terms of the regulation and supervision of FinTech and Digital Financial services, highlighted that the GFIN shared the survey used in the study with its members and undertook follow-up activities with them.³⁵ In addition, an interviewee explained that the GFIN has also created a new means of cooperation between financial services regulators to work on innovation-related topics, sharing different experiences and approaches, with the GFIN now facilitating other forms of regulatory collaboration beyond cross-border testing. The literature suggests that regulatory coherence is still evolving. For example, Parenti (2020) explained that, although the theory for the GFIN is positive, there is evidence that regulatory coherence has not yet been achieved.³⁶ This was evidenced in the cross-border trial that was run in 2019 where, of the eight firms involved, none were able to provide a testing plan that would satisfy the regulatory conditions required in all jurisdictions concerned. In addition, a report by the GFIN noted that an initial cross-border pilot found that the outcomes were not as effective as they potentially could have been due to inefficiencies between jurisdictions.³⁷ However, one interviewee explained that, in the most recent cross-border trial, firms were able to provide testing plans that satisfied conditions to test in multiple jurisdictions and that these are live currently. The improvements between the trial in 2019 and the most recent pilot suggest that the work of the GFIN in relation to regulatory coherence has progressed in practice.
- **Long-term agreements.** The interviewees agreed that the GFIN has led to the establishment of long-term agreements between the UK and other countries. One

³⁵ Please see: <https://www.jbs.cam.ac.uk/wp-content/uploads/2020/10/2020-ccaf-report-fintech-regulatory-rapid-assessment.pdf>

³⁶ 'Regulatory Sandboxes and Innovation Hubs for FinTech.' Parenti (2020).

³⁷ 'GFIN one year on report.' GFIN (2019).

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interviewee explained that regulators from several jurisdictions had reached out to the FCA as a result of the profile of the GFIN, with various agreements having been reached as a result.

- **Uptake of the IRC initiative.** The uptake of the GFIN has increased. One interviewee explained that the GFIN started with 11 members in January 2019, and is now at 74.
- **Global leader.** The interviewees argued that the GFIN has helped the FCA to continue to be a global leader in the field of financial services innovation. In particular, they considered that the GFIN enhanced the FCA's international reputation because it had championed the GFIN concept through the initial consultation, and subsequently provided both the initial Secretariat and Chair for two major GFIN workstreams once established. They also explained that the GFIN provided a way for the FCA to both share information and to gain information on what else is happening globally, helping to solidify its position as a global leader.
- **Wider economic outcomes.** The interview respondents considered that there are also wider economic outcomes to the UK arising from the GFIN. For example, one interview participant explained that the GFIN provides ways for UK businesses in the financial services industry to understand what regulatory support is available and how to apply for and access it, where this information might otherwise be hard to find. As a result of this, the most innovative firms are able to access this support from regulators, which subsequently benefits UK consumers and the UK more broadly.

In summary, we found evidence of realised intermediate outcomes arising from the GFIN initiative. In particular, we found that: (i) regulatory costs have reduced; (ii) there has been improved regulatory coherence and cross-border regulatory enforcement; (iii) long-term agreements have been established; (iv) wider economic outcomes have been realised; (v) the uptake of both IRC initiatives has increased; and (vi) the FCA has continued to be a global leader in financial services innovation. Launched in 2019, the GFIN initiative is relatively recent, and so more outcomes may be achieved in future.

Realised long-term benefits

Here, we discuss evidence of the realised long-term economic benefits of the IRC initiative.

- **Trade and FDI.** We found no available evidence to suggest that the GFIN has impacted trade and FDI. We expect this is due to the relative recency of the initiative. As explained previously, the GFIN was expected to contribute to increased trade and FDI, but these were not primary intended benefits of the initiative.
- **Productivity and growth.** We did not find evidence that the initiative has influenced productivity and growth. One interviewee noted that there should be future benefits to productivity and growth arising from the GFIN, but was unsure whether these had been realised yet. As explained previously, the initiative was expected to contribute to increased productivity and growth, but these were not primary intended benefits of the initiative.

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Therefore, we found no available evidence that trade and FDI or productivity and growth have been impacted by the GFIN. That is, whilst positive economic benefits are expected, so far there is limited robust evidence to demonstrate benefits have arisen in practice. This lack of evidence is likely attributable to the recency of the initiative. Indeed, since the initiative is relatively recent, we expect long-term economic benefits may be realised in future. One interviewee also explained that the FCA has not set out to measure whether the GFIN has had a positive effect on trade, FDI, productivity or growth. In addition, they noted that there is no mechanism available for firms to report that long-term economic benefits have occurred thanks to the GFIN, because economic benefits were not the objective of this IRC initiative.

Overall, the interviewees agreed that the impacts of the GFIN are likely to persist, as opposed to just being one-off. One interviewee suggested that the benefits are likely to be dynamic, due to increased engagement and understanding between different regulators. Another innovation-related IRC initiative initiated by the FCA is TechSprints. These are events that bring together regulators, businesses and industry experts to collaborate and find solutions to industry-wide challenges. One interviewee explained that innovation-related initiatives, such as the GFIN and TechSprints, are likely to grow in influence, as more and more regulators globally are using these as part of their regulatory toolkits.

Case Study: OECD International VAT/GST Guidelines

The Organisation for Economic Cooperation and Development's (OECD) International VAT/GST Guidelines were developed to reduce the uncertainty and risks of double taxation and unintended non-taxation which results from inconsistencies in the application of VAT/GST in a cross-border context. Overall, we found evidence of the intended benefits being realised – particularly in the case of fiscal revenues, regulatory coherence and cross-border regulatory enforcement.

Overview

Value Added Tax (VAT), also known as Goods and Services Tax (GST), is a general consumption tax that is charged by governments on the sale of goods and services to consumers, at every level of the supply chain at which value has been added.³⁸ The issue of which jurisdiction is eligible to charge VAT in cross-border situations has emerged with both globalisation and the growth of ecommerce. The absence of guidelines for VAT in these situations risks leading to: (i) non-taxation, where neither country collects tax revenue; or (ii) double taxation, where consumers are taxed in both countries. The OECD International VAT/GST Guidelines (the Guidelines), developed in 2014, set internationally agreed principles for the treatment of VAT in cross-border transactions. The Guidelines are based on the idea that tax should be charged at the location where the consumer is based ('taxed on consumption'). For example, products which are exported and consumed outside of the UK should not be subject to UK VAT, whereas products which are imported and consumed with the UK should be subject to UK VAT. The overarching objective of this IRC initiative is: "reducing the uncertainty and risks of double taxation and unintended non-taxation that result from inconsistencies in the application of VAT in a cross-border context".³⁹

The Guidelines were developed based on international cooperation between OECD member countries,⁴⁰ including the UK; and other relevant stakeholders, including academic and private institutions and businesses.⁴¹ Her Majesty's Revenue and Customs (HMRC) and Her Majesty's Treasury (HMT) helped develop these Guidelines.⁴² In particular, the UK helped establish 'Working Party 9' – the OECD working group which developed the Guidelines. The

³⁸ Please see: 'International VAT/GST Guidelines.' OECD (2017); 5; p.3.

³⁹ Please see: 'International VAT/GST Guidelines.' OECD (2017); 5; p.11.

⁴⁰ The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD. Please see: <https://www.oecd.org/about/members-and-partners/>

⁴¹ Please see: 'International VAT/GST Guidelines.' OECD (2017); 5; p.3.

⁴² Please see: 'International VAT/GST Guidelines.' OECD (2017); 5; p.11.

UK also currently chairs 'Working Party 9' and is a member of the OECD's technical advisory group.

In the subsequent sections, we present our findings from the literature review and interviews for this case study. We first discuss the intended impacts of the International VAT/GST Guidelines, before exploring the realised intermediate outcomes and long-term economic benefits of this IRC initiative. To inform this case study, we conducted interviews with two organisations: HMRC and HMT.

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of the OECD International VAT/GST Guidelines are as follows:

- **Regulatory costs.** The interviewees expected the IRC initiative to reduce administrative burdens and compliance regulatory costs for both businesses and governments, but noted that these were not the primary objective of the initiative. They further considered that, if the Guidelines were implemented by other countries, there would be cost savings for businesses who trade internationally. The expectation that the Guidelines would reduce regulatory costs and administrative burdens was confirmed in the literature review. For example, based on survey evidence, Charlet and Buydens (2012) found that differences in approaches to VAT between countries led to significant compliance and administration costs for businesses and governments.⁴³ The harmonisation of different countries' approaches to VAT should therefore have the effect of reducing these costs for businesses and governments.
- **Regulatory coherence and cross-border regulatory enforcement.** The interview participants explained that enhanced international regulatory coherence was an intended benefit of the initiative. In particular, they expected regulatory coherence between countries to improve as the Guidelines continue to be adopted by increasing numbers of countries. The OECD working group engages not only with member countries but also non-member countries and approaches businesses and governments. However, they did not consider improved cross-border regulatory enforcement to be an intended outcome, as the Guidelines are not legally binding.
- **Long-term agreements.** The interviewees considered that the establishment of long-term agreements was not an intended outcome of the initiative. However, they noted that the Guidelines themselves are a long-term agreement between countries, resulting in less uncertainty and reducing the risks of double taxation and unintended non-taxation.
- **Fiscal revenue.** The interview respondents explained that the OECD Guidelines were expected to increase fiscal revenue for member countries. By establishing clear rules

⁴³ 'The OECD International VAT/GST Guidelines: past and future developments.' Charlet and Buydens (2012).

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on VAT in cross-border transactions, the Guidelines should reduce the risk of non-taxation and therefore increase member countries' tax bases.

Below, we present the evidence of the intended long-term economic benefits of the OECD International VAT/GST Guidelines.

- **Trade and foreign direct investment (FDI).** The interviewees expected the IRC initiative to increase investment between the UK and other countries, but did not expect the initiative to increase UK trade. In particular, they explained that the Guidelines would help international investors better understand taxation rules in the UK. They also considered that the Guidelines would reduce incentives for businesses to relocate abroad in search of more favourable VAT policies, which would reduce outward FDI flows. In the literature review, we found evidence suggesting the IRC initiative was expected to increase trade levels. For example, O'Sullivan (2018) argued that double taxation discourages international trade and so, by preventing double taxation, the Guidelines are expected to increase trade.⁴⁴
- **Productivity and growth.** The interviewees did not consider that the OECD International VAT/GST Guidelines were expected to increase productivity and growth in the UK, but did consider that adoption of the Guidelines would remove incentives for businesses to relocate. However, the literature suggests the initiative could lead to growth. Charlet and Buydens (2012) argued that differences in approaches to VAT between jurisdictions hinder business activity, economic growth and competition.⁴⁵ Therefore, by improving coherence between countries, the OECD Guidelines should remove these barriers and encourage growth.

In the next section, we discuss whether these intended outcomes and benefits have been realised in practice, and how well evidenced and certain they are.

Realised intermediate outcomes

In this section, we discuss evidence of the realised intermediate outcomes of the IRC initiative, based on our findings in the literature review and the interviews.

- **Regulatory costs.** The interviewees were unable to identify any direct evidence that regulatory costs have been impacted by the OECD International VAT/GST Guidelines. They explained that: "it is difficult to quantify whether this has been achieved in practice". However, they explained that businesses involved in the work to help develop the Guidelines, and who also help to regularly review the application of the Guidelines, have clearly signalled that this is one of the benefits experienced from their perspective. As explained previously, the initiative was expected to reduce regulatory costs and administrative burdens for businesses and governments.

⁴⁴ 'Global Developments in VAT/GST - Overview and Outlook.' O'Sullivan (2018).

⁴⁵ 'The OECD International VAT/GST Guidelines: past and future developments.' Charlet and Buydens (2012).

- **Regulatory coherence and cross-border regulatory enforcement.** The interview participants considered that improved regulatory coherence has been achieved as a result of the OECD Guidelines. For example, building on the Guidelines and subsequent work arising from them, they explained that businesses were currently actively working with the OECD to come up with one coherent approach to VAT in the sharing economy, as opposed to differing approaches per country. In the literature review, we also found evidence of improved regulatory coherence. James and Ecker (2017) found that a number of jurisdictions had introduced reforms to implement the OECD Guidelines – including, for example, Australia, New Zealand, India, Albania, Japan, Kenya and Korea.⁴⁶
- **Long-term agreements.** The interview respondents did not point to any long-term agreements that have been established as a result of the OECD International VAT/GST Guidelines. As explained previously, this was not an expected outcome of the initiative.
- **Fiscal revenues.** The interviewees considered that the IRC initiative has led to significant positive outcomes in relation to fiscal revenues. They illustrated this through two examples. Firstly, the 2015 UK policy changes, resulting from the changes to services in the OECD VAT/GST Guidelines⁴⁷, were quantified to add: (i) approximately £300m per annum to the UK tax base through restoring the falling tax base, as detailed in the table overleaf;⁴⁸ and (ii) protect £5 billion per year through reducing the relocation of businesses to low tax jurisdictions. Secondly, the 2021 changes to the imports of low value goods and the liabilities of overseas suppliers to account for UK VAT, also based on the Guidelines, were estimated by the Office for Budget Responsibility (OBR) to raise over £300m per annum over the next 5 years.⁴⁹

“Significant positive outcomes have been achieved in relation to fiscal revenues”

⁴⁶ ‘Relevance of the OECD International VAT/GST Guidelines for non-OECD countries.’ James and Ecker (2017).

⁴⁷ The change implemented concerned who was taxed in the supply of electronic services. The Guidelines decided that the place of supply for VAT for these services is where the consumer is located.

⁴⁸ ‘Overview of Legislation in Draft’. HM Revenue & Customs and HM Treasury (2013).

⁴⁹ Please see:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/942358/VAT_-_Alternative_VAT_treatment_of_Goods_from_Overseas.pdf

Table 5: UK Treasury impact due to the change in OECD VAT/GST Guidelines

Year	Treasury impact
2014 - 2015	£70 million
2015 - 2016	£300 million
2016 - 2017	£315 million
2017 - 2018	£330 million

Source: 'Overview of Legislation in Draft.' HM Revenue & Customs and HM Treasury (2013).

- **Uptake of the IRC initiative.** The interviewees considered that the uptake of the IRC initiative has increased. They explained that engagement with and uptake of the Guidelines has increased internationally, including from non-OECD members.

In summary, there is some evidence available of realised outcomes arising from the OECD International VAT/GST Guidelines. In particular, this is demonstrated by the improvements in regulatory coherence, projected improvements in fiscal revenues and the increase in uptake of the IRC initiative. The interview participants argued that the on-going participation, and growing involvement of emerging economies in the OECD work, demonstrates that there is no doubt amongst the international tax policy community about the need for international consistency.

Realised long-term benefits

Here, we discuss the evidence of the realised long-term economic benefits of the OECD International VAT/GST Guidelines.

- **Trade and FDI.** We did not find any available empirical evidence to support trade and FDI being impacted by the IRC initiative. The interview participants explained that these benefits were difficult to quantify, but considered that: "the Guidelines have almost certainly supported these, by removing incentives for firms to relocate to low tax jurisdictions".

"The Guidelines have almost certainly supported trade and FDI, by removing incentives for firms to relocate to low tax jurisdictions"

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- **Productivity and growth.** The interviewees were unable to provide evidence that the Guidelines have impacted productivity or growth. However, as explained previously, the interview participants did not expect the initiative to lead to these benefits.

Therefore, we found that there is a lack of available empirical evidence on the long-term economic benefits arising from the OECD International VAT/GST Guidelines. That is, whilst positive economic benefits are expected, so far there is limited robust evidence to demonstrate benefits have arisen in practice. The interview participants argued that, although it is difficult to quantify the direct long-term economic benefits resulting from the Guidelines, they set a framework that achieves international consistency on cross-border trade and helps safeguard economic activity and growth.

Overall, the interviewees considered that the impacts of the IRC initiative would persist and would not be 'one-off'. They considered that the number of years that have passed since the establishment of the Guidelines and the on-going international interest in them and request for further information about them are testament to this. In addition, they explained that the initiative helps create a continuous revenue stream for the UK government and therefore delivers persistent benefits for the UK economy in this way.

Case Study: IPSF

The International Platform for Sustainable Finance (IPSF) was developed with the objective of increasing investment in sustainable economic activities. We anticipate that this IRC initiative will deliver substantial benefits – particularly relating to the UK’s climate objectives, and long-term agreements aimed at establishing a ‘green taxonomy’. However, we found that the current evidence supporting these benefits is limited due to this IRC initiative still being in its infancy.

Overview

Sustainable finance refers to the process of taking environmental, social and governance (ESG) considerations into account when making investment decisions, with the objective of increasing investments in sustainable economic activities and projects.⁵⁰ More specifically:

- Environmental considerations encompass a wide range of issues, such as: (i) climate change mitigation and adaptation; (ii) the preservation of biodiversity; (iii) pollution prevention; and (iv) the circular economy.⁵¹
- Social considerations address matters relating to inequality, inclusiveness, labour relations and human rights.
- Governance, the third principle of sustainable finance, ensures the inclusion of social and environmental considerations in the decision-making process through the design of management structures, employee relations, executive remuneration and similar aspects.

The IPSF was developed with the goal of increasing investment in sustainable economic activities. In particular, the objective of the IPSF is to “scale up the mobilisation of private capital towards environmentally sustainable finance at the global level and promote integrated markets for environmentally sustainable finance”.⁵² The IPSF strives towards these objectives through facilitating information sharing between members relating to information on the most environmentally sustainable finance practices and mechanisms to reduce barriers to these practices. The IPSF offers a forum for discussions to take place between policymakers who are leading the development of sustainable finance regulatory measures. The members of the initiative share and disseminate information to: (i) promote best practice; (ii) compare their

⁵⁰ Please see: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/overview-sustainable-finance_en#:~:text=Sustainable%20finance%20refers%20to%20the,sustainable%20economic%20activities%20and%20projects.

⁵¹ The circular economy is a model of production and consumption, which involves stretching a products lifespan as long as possible through activities such as reusing, repairing, recycling and so forth.

⁵² ‘International Platform on Sustainable Finance Annual Report’. IPSF (2020).

different initiatives; and (iii) identify barriers and opportunities of sustainable finance. The long-term objective is for members to further align their initiatives and approaches.⁵³

The IPSF was launched in 2019 when public authorities from Argentina, Canada, Chile, China, India, Kenya and Morocco, together with the European Union, committed to working together to promote these ESG considerations.⁵⁴ After leaving the EU, the UK independently re-joined the IRC initiative two years later in 2021.

In the subsequent sections, we present our findings from the literature review and interviews on: (i) the intended outcomes and benefits of the IPSF; (ii) the realised intermediate outcomes of this IRC initiative; and (iii) the realised long-term economic benefits of the initiative. To inform this case study, we conducted interviews with the UK Sustainable Investment and Financial Association (UKSIF). The UKSIF is a membership body for sustainable finance, with its members including asset managers, independent financial advisors and pension funds. Members of the UKSIF are global investors, and therefore may be affected by the IPSF.

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of the IPSF are as follows.

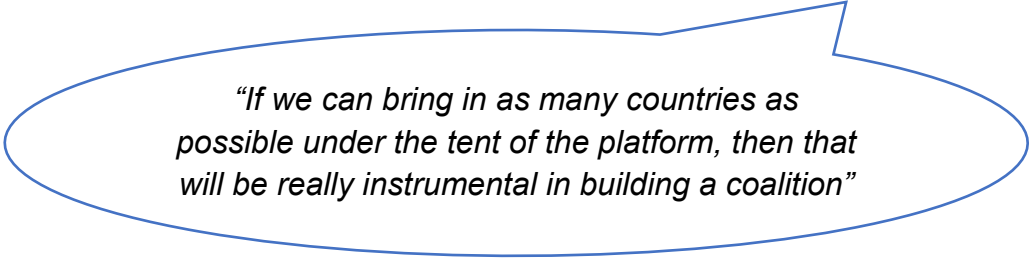
- **Regulatory costs.** The interview participants considered that a reduction in compliance and administrative regulatory costs was one of the key aims in establishing the IRC initiative. The interviewees explained that better coordination on the understanding of the green taxonomy, a common framework for determining which activities can be defined as environmentally sustainable, should result in a reduction of regulatory costs. This is because less time and resource would be required in order to comply with regulations in different jurisdictions, if regulations across different countries are aligned. The IPSF Annual Report states that successful regulatory examples, such as corporate environmental-related disclosure, will help investor decision-making and that international coordination on environmental-related disclosure would increase global transparency, reduce due-diligence costs for investors and reduce administrative costs for companies.⁵⁵ The IPSF provides a platform where member countries can learn from each other and apply successful regulations illustrated by other countries to their own domestic policies.
- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees stated that improved regulatory coherence is the main purpose of the IPSF and that the IPSF is working towards a clear understanding and agreement on the green taxonomy.
- **Long-term agreements.** The interviewees did not identify whether long-term agreements were an intended benefit of the IRC initiative. However, the interview participants referenced the common framework defining which activities are defined as

⁵³ Please see: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/international-platform-sustainable-finance_en

⁵⁴ 'International Platform on Sustainable Finance Annual Report'. IPSF (2020).

⁵⁵ 'International Platform on Sustainable Finance Annual Report'. IPSF (2020).

environmentally sustainable – the green taxonomy – as a type of future agreement. They also pointed towards the importance of countries joining the IPSF, so that a large number of countries agree on this proposed green taxonomy.



“If we can bring in as many countries as possible under the tent of the platform, then that will be really instrumental in building a coalition”

- **Climate objectives.** The IPSF Annual Report states that international guidance on sustainable finance has the potential to help countries meet climate objectives, such as those from the Paris Agreement.⁵⁶ Lehmann and Plant (2020) additionally argued that a high international standard for sustainable finance could reduce the risk of ‘greenwashing’⁵⁷, which it says could undermine all sustainable finance assets.⁵⁸

Below, we present the evidence of the intended long-term economic benefits of the IPSF.

- **Trade and foreign direct investment (FDI).** The interview participants expressed that trade and FDI were not explicit intended benefits of the IPSF. They explained that there may be indirect effects because of the initiative, but this was not its purpose. In our literature review, we found that taxonomies facilitate green investments by improving market clarity and confidence for investors.⁵⁹ The same report also notes that the aim of this IRC initiative is to facilitate cross-border green capital flows.
- **Productivity and growth.** The interviewees considered that this was not a primary intention of the initiative but that there could nonetheless be knock-on effects as a result. The participants explained that the baseline common taxonomy would provide more certainty in the sector, which could lead to benefits in productivity and growth for the IPSF members. The IPSF Annual Report highlights that if taxonomies are developed in isolation, they might lead to fragmentation and hinder the growth of sustainable finance markets. Therefore, the IPSF has created a working group on taxonomies which will publish a Common Ground Taxonomy to address this concern.

In the next section, we discuss whether these intended outcomes and benefits have been realised in practice, and how well evidenced and certain they are.

Realised intermediate outcomes

We present our findings on the realised intermediate outcomes of the IPSF overleaf.

⁵⁶ ‘International Platform on Sustainable Finance Annual Report’. IPSF (2020).

⁵⁷ Greenwashing is a deceptive marketing technique to mask a product or activity as more environmentally sustainable than it is in practice.

⁵⁸ ‘Climate finance: an agenda for EU coordination with emerging markets’. Lehmann and Plant (2020).

⁵⁹ ‘International Platform on Sustainable Finance Annual Report’. IPSF (2020).

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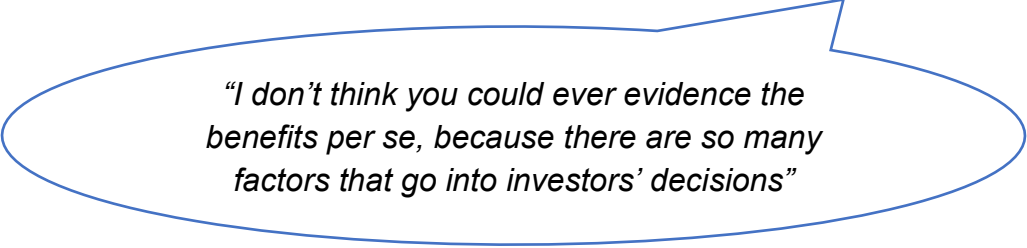
- **Regulatory costs.** The interviewees felt that it was too early to assess whether the intended reduction in regulatory costs has been realised. The interview participants were optimistic about the future and expect there to be evidence of a reduction in regulatory costs due to this IRC initiative.
- **Regulatory coherence and cross-border regulatory enforcement.** The interview participants stated that no tangible benefits regarding regulatory coherence and cross-border regulatory enforcement have been realised yet, due to the IRC initiative still being in its infancy. The interviewees emphasised the importance of having a proactive UK government and FCA in the post-Brexit era to ensure that the intended benefits in this area are realised. Without the commitment and support from both the government and the FCA, the interviewees found that the progress made within the IPSF would not be translated into positive domestic policy changes.
- **Long-term agreements.** The interviewees were not aware of any long-term agreements that have been established as a result of the IPSF. However, they were hopeful about the prospects of the green taxonomy and the acceptance and adoption of it across many jurisdictions.
- **Climate objectives.** The interviewees were not able to identify any evidence of the climate objectives being realised. Notwithstanding this, they remained optimistic about the potential of the IPSF and its likely climate outcomes.

In summary, based on the available evidence, we found that no intermediate outcomes have been realised as a result of this IRC initiative. This is because we consider it is still too soon for the intended benefits to have arisen, given the initiative's recency.

Realised long-term benefits

In this section, we discuss the evidence of the realised long-term economic benefits of the IPSF.

- **Trade and FDI.** The interviewees could not point to any evidence of beneficial trade and FDI impacts as a result of the IPSF and further explained that this was not an intended aim of the IRC initiative. One interviewee stated that it will always be a challenge to attribute changes in investment to one initiative or aspect of regulation, as investor decisions are driven by a number of different factors.



"I don't think you could ever evidence the benefits per se, because there are so many factors that go into investors' decisions"

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- **Productivity and growth.** Productivity and growth do not appear to have been impacted by the IPSF and the interviewees stated that this was because it was too early to measure. The interview participants appeared optimistic about the future and expected the common taxonomy to play a role in producing productivity and growth benefits for the sector, even if this would happen indirectly.

Based on the above, we found no evidence of long-term economic benefits being realised as a result of the IPSF.

Overall, the interviewees believed that the UK will reap the benefits of the IPSF in the future and this will occur persistently instead of manifesting as a one-off event. Further, the interview respondents considered that the work of the IPSF will be critical for the success of the sustainable sector if they do get this approach right.

Case Study: IOSCO

The International Organisation of Securities Commissions (IOSCO) is an association of the world's securities regulators, which aims to develop internationally recognised and consistent standards of regulation, oversight and enforcement. We found evidence that this IRC initiative has led to enhanced regulatory enforcement, reduced transaction costs and improvements in liquidity. In addition, there has been an increase in the uptake of the initiative.

Overview

Securities are tradeable financial assets, which can broadly be categorised into: (i) equity securities, which represent a share of ownership in an entity (e.g. stocks); (ii) debt securities, which represent borrowed money to be repaid under specified terms (e.g. bonds); and (iii) hybrid securities, which combine characteristics of equity and debt securities (e.g. convertible bonds). Securities regulators exist to protect investors and ensure that markets are fair and transparent, as well as reduce the risk of market collapse.

IOSCO, founded in 1983, is an association of the world's securities regulators. Its members work together to: (i) develop and implement international standards for securities regulation; (ii) protect investors and promote investor confidence; and (iii) exchange information on market developments. IOSCO itself is a member of the Financial Stability Board (FSB), an international body established by the G20 to monitor and make recommendations about the global financial system. IOSCO also collaborates with a range of other standard-setting bodies, including the Committee on Payments and Market Infrastructures (CPMI). The overarching objective of this IRC initiative is the: "development and implementation of internationally recognised and consistent standards of regulation, oversight and enforcement".⁶⁰

IOSCO members regulate over 95% of the world's securities and represent more than 130 jurisdictions. Its members include national securities regulators, such as the UK's Financial Conduct Authority (FCA), as well as international organisations, such as the World Bank and the International Monetary Fund (IMF). The FCA is a member of the IOSCO board, which is the standards-setting body of IOSCO.

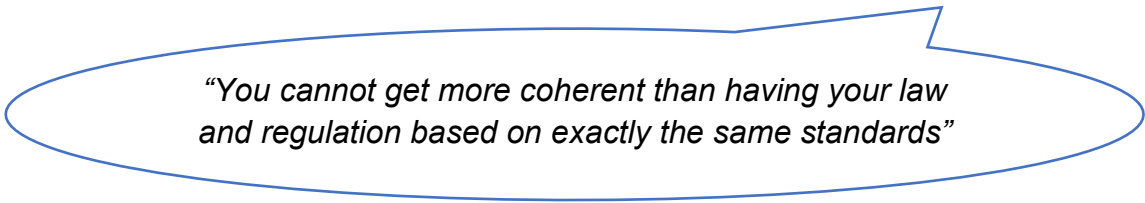
In the subsequent sections, we present our findings from the literature review and interviews on: (i) the intended outcomes and benefits of IOSCO; (ii) the realised intermediate outcomes of this IRC initiative; and (iii) the realised long-term economic benefits of the initiative. To inform this case study, we conducted interviews with the FCA and UK Finance.

⁶⁰ Please see: https://www.iosco.org/about/?subsection=about_iosco

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of IOSCO are as follows.

- **Regulatory costs.** The interview participants expected IOSCO to reduce regulatory costs for both governments and businesses, but noted that this was not an explicit aim of the association. For example, one interviewee explained that achieving consistency in international standards should help reduce regulatory costs for securities regulators. Another interviewee argued that having a single international regulatory regime should reduce costs for businesses, as companies do not have to comply with separate regulatory regimes across jurisdictions.
- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees considered that IOSCO was intended to improve both regulatory coherence and cross-border regulatory enforcement. For example, they explained that IOSCO would help achieve regulatory coherence through shared principles, standards and guidelines, and that “you cannot get more coherent than having your law and regulation based on exactly the same standards”. This was confirmed in the literature review. For instance, Austin (2015) argued that non-signatory jurisdictions are likely to be pressurised into joining IOSCO, which would make regulations in these countries consistent with other signatories. A paper by the Directorate General for Internal Policies argued that improved regulatory coherence and enforcement were expected from IOSCO, since member agencies work together and exchange information.⁶¹ Silvers (2020) argued that regulatory coherence and cross-border enforcement was encouraged by IOSCO, due to the standardised approaches to collecting and sharing information.⁶²



“You cannot get more coherent than having your law and regulation based on exactly the same standards”

- **Long-term agreements.** One interviewee expected the IRC initiative to lead to the establishment of long-term agreements. In particular, they argued that the principles, standards and guidelines of IOSCO would be long-standing.

Below, we present evidence of the intended long-term economic benefits of the initiative.

- **Trade and foreign direct investment (FDI).** The interviewees considered that IOSCO was expected to increase trade and FDI, but that these were not the primary intended benefits of this IRC initiative. The interviewees explained that improved regulatory coherence resulting from IOSCO would mean that member jurisdictions would be more

⁶¹ ‘The European Union’s Role in International Economic Fora: The International Organisation of Securities Commissions (IOSCO).’ Directorate General for Internal Policies (2015).

⁶² ‘Cross-border cooperation between securities regulators.’ Silvers (2020).

likely to trade and do business with each other and that global standards resulting from IOSCO should promote trade of financial services.

- **Productivity and growth.** The interview respondents expected IOSCO to lead to growth, and one interviewee expected IOSCO to improve productivity. They explained that better regulation and the adoption of global standards in the industry should lead to both productivity and growth.

In the following sections, we discuss whether these intended outcomes and benefits have been realised, and how well evidenced and certain the realised outcomes and benefits are.

Realised intermediate outcomes

In this section, we present evidence of realised intermediate outcomes of IOSCO.

- **Regulatory costs.** We did not find any available evidence that IOSCO has impacted regulatory costs. As explained previously, the initiative was expected to reduce regulatory costs for both governments and businesses. In the literature review, Silvers (2020) found that, by improving cross-border cooperation, IOSCO led to a fall in transaction costs (e.g. broker commissions and bid-ask spreads) for businesses, based on empirical evidence.⁶³
- **Regulatory coherence and cross-border regulatory enforcement.** Evidence from the interviews and literature review suggests that cross-border regulatory enforcement and regulatory coherence have improved as a result of IOSCO. For example, the interviewees argued that the Multilateral Memorandum of Understanding (MMoU)⁶⁴, a non-binding agreement set up by IOSCO which sets out principles to help regulators combat cross-border misconduct, had improved enforcement. In the literature review, Austin (2015) argued that, as a result of developing “Objectives and Principles of Securities Regulation”, IOSCO has been able to guide the regulations and securities laws of its members, thus resulting in a more consistent approach to regulation.⁶⁵ A paper by the Directorate General for Internal Policies argued that the increased cooperation resulting from IOSCO made it easier for member agencies to gather evidence of market abuses across borders, such as insider trading, and so had improved cross-border enforcement.⁶⁶
- **Long-term agreements.** We found evidence of long-term agreements being established as a result of IOSCO. In particular, the interviewees pointed to the MMoU, which has been in place since 2002 and has 125 signatories, out of 159 total members. In addition, they explained that the Extended MMoU (EMMoU) was a supplementary long-term agreement which resulted from the MMoU, with 20 member signatories.

⁶³ ‘Cross-border cooperation between securities regulators.’ Silvers (2020).

⁶⁴ Please see: <https://www.iosco.org/about/?subsection=mmou>

⁶⁵ ‘The Power and Influence of IOSCO in Formulating and Enforcing Securities Regulations’. Austin (2015).

⁶⁶ ‘The European Union’s Role in International Economic Fora: The International Organisation of Securities Commissions (IOSCO).’ Directorate General for Internal Policies (2015).

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- **Uptake of the IRC initiative.** The interview respondents considered that there has been an increase in the uptake of IOSCO. They also explained that new members join IOSCO each year, and that this IRC initiative now covers 95% of the world's securities markets.

Overall, we found evidence of realised outcomes arising from this initiative in both the interviews and the literature. In particular, there have been improvements in regulatory enforcement, long-term agreements being established and an increase in the uptake of this IRC initiative. Notably, one interviewee stated that they were “confident” in the evidence of improved regulatory enforcement. However, we found that little empirical evidence on the realised outcomes was available. For instance, the paper by Silvers (2020) found that IOSCO led to a fall in transaction costs, but did not indicate by how much these had changed.⁶⁷

Realised long-term benefits

Here, we discuss evidence of the realised long-term economic benefits of this IRC initiative, based on our findings in the literature review and interviews.

- **Trade and FDI.** We found no evidence to suggest that trade and FDI have increased as a result of this IRC initiative. It is important to note that these were not primary intended benefits of IOSCO, but were expected benefits of the initiative.
- **Productivity and growth.** We found no evidence to support productivity and growth being impacted by IOSCO. As explained previously, both interview participants expected the initiative to lead to growth and one interviewee considered that productivity was an expected benefit.
- **Liquidity improvements.** Evidence from the literature review indicates that there have been improvements in liquidity resulting from IOSCO. Silvers (2020) found that, as a result of IOSCO's MMoU, home shares (cross-border shares traded in local markets) experienced liquidity improvements of 6-9%, whilst host shares (cross-border shares listed in foreign markets) experienced liquidity improvements of 25-30%.⁶⁸

In summary, we found no evidence to suggest that trade and FDI or productivity and growth have been impacted by IOSCO. However, evidence from the literature review indicates that the IRC initiative has led to liquidity improvements. This finding was based on regression analysis by Silvers (2020), which used transaction costs as an inverse proxy for liquidity.⁶⁹

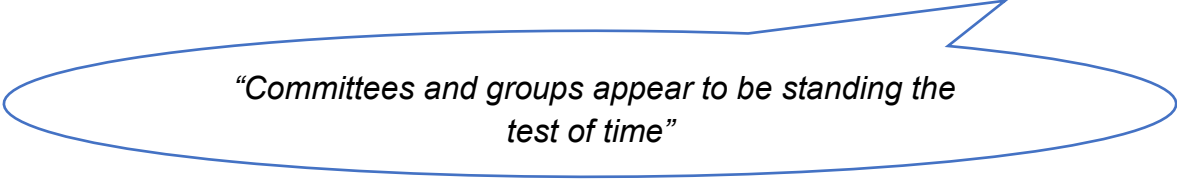
⁶⁷ 'Cross-border cooperation between securities regulators.' Silvers (2020).

⁶⁸ 'Cross-border cooperation between securities regulators.' Silvers (2020).

⁶⁹ 'Cross-border cooperation between securities regulators.' Silvers (2020).

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Both interview participants considered that the impacts of this IRC initiative were likely to persist and not 'one-off' impacts. For example, one interviewee explained that IOSCO "committees and groups appear to be standing the test of time", as they remain relevant and are an important way in which international regulation develops.



"Committees and groups appear to be standing the test of time"

Case Study: CAC and INFOSAN

The Codex Alimentarius Commission (CAC) develops internationally agreed food standards, guidelines and codes of practice. The International Food Safety Authorities Network (INFOSAN) is a global network aimed at helping members manage food safety risks. Overall, we found evidence of the intermediate outcomes arising from these IRC initiatives – in particular, through improved regulatory coherence and information sharing. However, we found limited available evidence of long-term economic benefits arising from CAC and INFOSAN as it is particularly difficult to attribute these to the IRC initiatives in isolation. Despite this, the interview participants were still confident in the success of the initiatives.

Overview

The Food Standards Agency (FSA) is an independent government department. Its main objective is food safety, with its remit extending to the interests of consumers and its output primarily consumer-focussed. Two IRC initiatives that the FSA has been involved in are: (i) the CAC; and (ii) INFOSAN.

The CAC was established in 1963 by the Food and Agriculture Organisation (FAO) of the United Nations and the World Health Organisation (WHO). The CAC develops internationally agreed food standards, guidelines and codes of practice. The CAC has 189 members, including the EU, US, UK and China. Members who want to set more stringent standards than those developed by the CAC must produce robust scientific evidence to justify their decision. The CAC's objective is to ensure that: "consumers can trust the safety and quality of the food products they buy and importers can trust that the food they ordered will be in accordance with their specifications".⁷⁰

INFOSAN, a specialist department of the WHO, is a global network of national food safety authorities. Established in 2004, INFOSAN comprises 190 member countries. INFOSAN helps members manage food safety risks – for example, by rapidly sharing information during food safety emergencies to stop the spread of contaminated food between countries. The objective of this IRC initiative is to: "strengthen prevention, preparedness and response to food safety incidents and emergencies through fostering a global community of practice among food safety professionals".⁷¹

In the following sections, we present our findings from the literature review and interviews on: (i) the intended outcomes and benefits of both the CAC and INFOSAN; (ii) the realised intermediate outcomes of this IRC initiative; and (iii) the realised long-term economic benefits of the initiative. To inform this case study, we conducted two interviews with the FSA.

⁷⁰ Please see: <http://www.fao.org/fao-who-codexalimentarius/about-codex/en/>

⁷¹ Please see: <http://www.fao.org/food-safety/food-control-systems/empres-food-safety/infosan/en/>

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of the CAC and INFOSAN are as follows.

- **Regulatory costs.** The interview participants expected these initiatives to reduce research and compliance regulatory costs for member countries' regulatory bodies and businesses respectively, but noted that the primary objective of the initiatives was to ensure safe food products for consumer consumption. They explained that the research carried out by the CAC and INFOSAN would reduce regulatory costs for the FSA, as they would not need to conduct this work themselves. The interviewees also considered that, by promoting best practice and ensuring that standards are properly understood and implemented, the initiatives were expected to reduce the number of food recalls. This would prevent the significant costs relating to recalls experienced by businesses. The literature review confirmed that the CAC was expected to reduce regulatory costs for both businesses and countries. A report by the FAO and the World Trade Organisation (WTO) concluded that, because all goods are required to pass the same quality control checks, CAC member states experience savings, as they do not have to duplicate their own checks.⁷²
- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees expected the CAC to improve regulatory coherence across borders, as it sets guidelines for regulations. One interviewee compared the CAC to the "bible of regulation" and explained how member countries aspire to meet its standards, in the drafting and implementation of their own respective regulations. With regards to INFOSAN, the interviewees considered that improved regulatory coherence and cross-border regulatory enforcement were intended benefits of the initiative. Although the recommendations of INFOSAN were not directly enforceable, the interviewees argued that it was expected to lead to better alignment and enforcement of global food safety regulations.
- **Long-term agreements.** The interviewees stated that further long-term agreements were not expected as a result of the CAC or INFOSAN. However, they noted that the CAC itself is a long-term agreement, which is regularly reviewed. They also explained that the guidance of INFOSAN is intended to be long-term, but no agreements were anticipated other than being a member of the group.

Below, we present evidence of the intended long-term economic benefits of the CAC and INFOSAN initiatives.

- **Trade and foreign direct investment (FDI).** The interviewees stated that they were not aware of any intended trade or FDI related benefits of either the CAC or INFOSAN initiatives. However, the CAC website states that one of its intentions is to remove barriers to trade, through establishing a single minimum standard. One interviewee also expressed the view that, without the initiatives, the UK would have a poorer reputation in

⁷² 'Trade and Food Standards.' Food and Agriculture Organisation of the United Nations and World Trade Organisations (2017).

terms of its capability around food safety and standards, which would reduce the ease with which the UK could export any food produce. In the literature review, we found evidence that the CAC was expected to increase trade. For example, Wilson and Otsuki (2003) found that, if all countries had adopted the CAC agreed standards for aflatoxin levels, the value of world cereal and nut trade would have increased by \$6.1 billion, or 51%, in 1998.⁷³ In addition, they found that, if six importing countries had adopted the CAC agreed tetracycline standard, the value of beef trade would have increased by \$8.8 billion for the six importing and 16 exporting countries in the study. The FAO and WTO also considered that the CAC was expected to deliver trade benefits.⁷⁴ In particular, if food producers do not need to know their final market in advance of growing their products, due to produce being more widely accepted, the authors argued that this should reduce unnecessary trade restrictions and increase trade. Finally, Veggeland and Borgen (2005) also expected the CAC to minimise trade restrictions and increase trade flows.⁷⁵ They explained that the CAC prevents countries establishing unjustifiably high standards that act as barriers to trade.

- **Productivity and growth.** The interviewees expressed that, although productivity increases and growth of the sector were not the primary aims of the IRC initiatives, these benefits were expected to arise. In particular, they anticipated that information sharing between member states would help members improve their own internal systems, which they relied upon to ensure the safety of food produce for consumers. One interviewee believed that the initiatives would assist businesses in, for example, the handling of incidents, which would enable them to return to production in a timely manner, thus improving productivity. This was also confirmed in the literature review. For example, the FAO and WTO explained that, in the absence of different restrictions between markets, goods can be produced more efficiently.⁷⁶ In particular, if only one standard is required, only one quality control process is needed, instead of multiple ones, which allows producers to benefit from greater economies of scale.

In the next sections, we discuss whether these intended outcomes and benefits have been realised, and how well evidenced and certain the realised outcomes and benefits are.

Realised intermediate outcomes

Here, we discuss evidence of the realised intermediate outcomes of the IRC initiatives.

- **Regulatory costs.** Regulatory costs do not appear to have been impacted by the CAC or INFOSAN. As explained previously, these initiatives were expected to reduce regulatory costs for both businesses and governments.

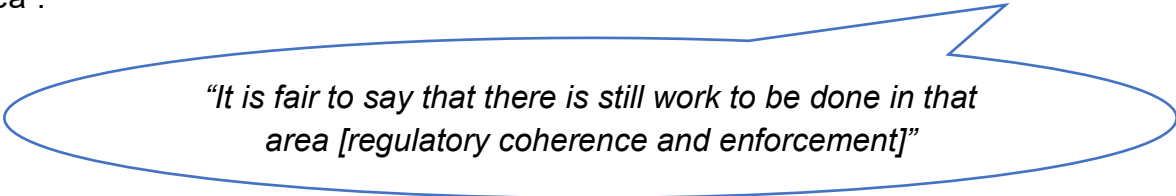
⁷³ 'Balancing Risk Reduction and Benefits from Trade in Setting Standards.' Wilson and Otsuki (2003).

⁷⁴ 'Trade and Food Standards.' Food and Agriculture Organisation of the United Nations and World Trade Organisations (2017).

⁷⁵ 'Negotiating International Food Standards: The World Trade Organisation's Impact on the Codex Alimentarius Commission.' Veggeland and Ole Borgen (2005).

⁷⁶ 'Trade and Food Standards.' Food and Agriculture Organisation of the United Nations and World Trade Organisations. (2017).

- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees considered that improvements in regulatory coherence and cross-border regulatory enforcement have been realised with regards to the CAC, because member countries are working towards the same standards. With regards to INFOSAN, the interviewees noted that work was still on-going and that this was expected in the future. One interviewee explained that: “it is fair to say that there is still work to be done in that area”.



“It is fair to say that there is still work to be done in that area [regulatory coherence and enforcement]”

- **Long-term agreements.** We did not find any evidence of long-term agreements being established as a result of the CAC and INFOSAN initiatives. However, this was not an intended outcome of these initiatives.
- **Sharing of information.** The interviewees argued that INFOSAN has improved the sharing of information relating to food safety in two ways, through: (i) online sources, such as the INFOSAN website, sharing information on best practices; and (ii) working groups, focussing on issues such as crisis coordination and harmonisation of risk communication across the globe.

Therefore, there is limited evidence of realised intermediate outcomes arising from the CAC and INFOSAN initiatives. In particular, we only found evidence of improvements in regulatory coherence and information sharing.

Realised long-term benefits

In this section, we present evidence of the realised long-term economic benefits of the IRC initiative.

- **Trade and FDI.** The interviewees did not identify any evidence of trade or FDI being impacted by the initiatives. In the literature, the FAO and WTO found that food exports increased from \$23 billion in 1963 when the CAC was formed, to \$1,119 billion in 2013.⁷⁷ However, this increase cannot be attributed to the CAC alone, as other factors such as globalisation also caused food exports to increase over time.
- **Productivity and growth.** The respondents were unable to point to any evidence of productivity and growth being impacted by the CAC and INFOSAN initiatives, nor did we find any evidence of this in the literature. As explained previously, increases in productivity and growth were expected to arise from these initiatives but were not the primary intended aims of the initiatives.

⁷⁷ ‘Trade and Food Standards.’ Food and Agriculture Organisation of the United Nations and World Trade Organisations (2017)

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In summary, we found no evidence of any long-term economic benefits being realised by the CAC and INFOSAN initiatives. Indeed, the interview participants noted that the benefits of these initiatives are not very clear empirically.

Overall, the interviewees strongly believed that the impacts of the CAC and INFOSAN initiatives were likely to persist and develop further. They explained that: (i) the CAC is continually improving; and (ii) improvements are being made to the processes and systems within INFOSAN.

Case Study: International Convention on Nuclear Safety

The International Convention on Nuclear Safety aims to ensure worldwide nuclear safety through international cooperation. Overall, we found evidence of realised intermediate outcomes arising from this IRC initiative – in particular, through the establishment of long-term agreements and through improvements in nuclear safety.

Overview

Nuclear power plants require stringent safety regulations due to the high levels of radiation that result from the process. The International Convention on Nuclear Safety (the Convention) is an international treaty that aims to ensure worldwide nuclear safety through international cooperation. The Convention involves: (i) safety related cooperation, through regular meetings; (ii) the development of international standards, such as the International Atomic Energy Agency's (IAEA) safety standards; and (iii) agreements to allow international peer reviews on regular three-year cycles, to ensure members are compliant with current regulations. Its objective is: "to commit Contracting Parties operating land-based civil nuclear power plants to maintain a high-level of safety by establishing fundamental safety principles to which states would subscribe."⁷⁸

The Convention was signed in 1994 and now has 78 signatory countries. The UK was one of the original signatories of the Convention and submitted its eighth national report on compliance in July 2021, which is a requirement for each signatory to do every three years.⁷⁹ On behalf of the UK government, the Office for Nuclear Regulation (ONR) leads in gathering information for the Convention's international peer reviews, which ensure the UK, as a member, is compliant with current nuclear regulations.

In the subsequent sections, we present our findings from the literature review and interviews on: (i) the intended outcomes and benefits of the Convention; (ii) the realised intermediate outcomes of this IRC initiative; and (iii) the realised long-term economic benefits of the initiative. To inform this case study, we conducted interviews with three individuals from the ONR.

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of the Convention are as follows.

⁷⁸ Please see: <https://www.iaea.org/topics/nuclear-safety-conventions/convention-nuclear-safety>

⁷⁹ 'The United Kingdom's Eighth National Report on Compliance with the Convention in Nuclear Safety.' Department for Business, Energy & Industrial Strategy (2021).

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- **Regulatory costs.** The interview respondents did not expect the IRC initiative to affect regulatory costs, explaining that the Convention's main objective is centred around safety.
- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees considered that the Convention was intended to improve regulatory coherence. They expected the initiative to achieve this by providing standards and regulations for signatory countries. This was confirmed in the literature review. A report by the US Government Accountability Office (GAO) considered that the Convention encourages regulatory coherence through improved sharing of best practice between signatories.⁸⁰ It also argued that the regulatory framework which the Convention requires signatories to follow encourages transparency, through the requirement to publish a peer-reviewed report every three years.
- **Long-term agreements.** The interview participants argued that the Convention was expected to lead to the establishment of long-term agreements between the UK and other countries.
- **Nuclear safety.** The interviewees considered that improving nuclear safety was the primary intended benefit of the IRC initiative.

Below, we present the evidence of the intended long-term economic benefits of the Convention.

- **Trade and foreign direct investment (FDI).** The interviewees did not consider that the Convention was expected to increase trade or FDI.
- **Productivity and growth.** The interview participants expected the IRC initiative to improve productivity, but not lead to growth. They explained that enhancing site safety improves productivity and cost-effectiveness, compared to sites experiencing an unsafe event, such as an explosion.

In the next section, we discuss whether these intended outcomes and benefits have been realised, and how well evidenced and certain they are.

Realised intermediate outcomes

Here, we discuss evidence of the realised intermediate outcomes of the IRC initiative, based on our findings in the literature review and interviews.

- **Regulatory costs.** The interviewees did not identify any evidence of regulatory costs being impacted by the Convention. As explained previously, the initiative was not expected to reduce regulatory costs.
- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees did not provide strong views on whether improved regulatory coherence has been

⁸⁰ 'Convention on Nuclear Safety Is Viewed by Most Member Countries as Strengthening Safety Worldwide.' GAO (2010).

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achieved as a result of the initiative. However, they noted that signatories to the Convention have to comply with the same nuclear safety standards and thus regulatory coherence exists in that sense.

- **Long-term agreements.** The interview participants considered that long-term agreements have been established as a result of the IRC initiative. In particular, they highlighted the ‘government-to-government’ agreement between the UK, Australia, Canada, Japan and the United States, which is primarily concerned with information exchange.⁸¹
- **Nuclear safety.** The interviewees considered that improvements in nuclear safety have been achieved as a result of the Convention. They explained that the peer review process had helped establish safe and secure nuclear plants in signatory countries, such as the UK. This was confirmed in the literature review, where a report by GAO argued that the Convention had facilitated joint research and exchanges of information between signatories, which helped to improve best practice and safety.⁸² GAO concluded this based on survey responses from representatives of parties to the Convention.

In summary, we found some evidence of realised intermediate outcomes arising from the IRC initiative. This is evidenced through the establishment of long-term agreements and improvements in nuclear safety.

Realised long-term benefits

In this section, we discuss evidence of the realised long-term economic benefits of the IRC initiative.

- **Trade and FDI.** The interviewees did not point towards any evidence that trade and FDI have been impacted by the Convention. This was not an intended benefit of the initiative.
- **Productivity and growth.** Productivity and growth do not appear to have been impacted by the IRC initiative, despite improved productivity being an intended benefit.

Therefore, we found no available evidence of long-term economic benefits arising from the Convention.

Overall, the interviewees believed that the Convention had been successful and “stood the test of time”. The interview participants noted that the nuclear industry is highly dynamic, and so they considered that regulation needs to be agile enough to respond to the changing nature of the sector. The interviewees explained that this was paramount to the Convention’s success and persistence of safety benefits in the future.

⁸¹ ‘Nuclear Cooperation Agreements Between the United Kingdom and International Partners.’ Department for Business, Energy & Industrial Strategy (2021).

⁸² ‘Convention on Nuclear Safety Is Viewed by Most Member Countries as Strengthening Safety Worldwide.’ GAO (2010).

Case Study: Standard ISO 45001

ISO 45001 is an international standard that aims to ensure that workplaces are healthy and safe by preventing work-related injury and ill health. Evidence suggests that there has been an increase in the uptake of this IRC initiative since its implementation in 2018, as the number of countries participating in the initiative increased. Given the recency of the initiative, it is likely that other outcomes and benefits have not yet been fully realised. Notwithstanding this, they may still arise in the future.

Overview

According to the International Labour Organisation, more than 7,600 people worldwide die as a result of accidents or diseases related to work each day.⁸³ Occupational health and safety standards are required to help reduce workplace risks and help prevent work-related death, injury and ill health. ISO 45001 is an international standard for health and safety at work, which provides a framework and guidance for businesses on how to ensure workplace health and safety. It was introduced in the UK in March 2018 and replaced the previous British standard BS08SOS 18001. The overarching objective of this IRC initiative is: “to enable organisations to provide safe and healthy workplaces by preventing work-related injury and ill health”.⁸⁴

The UK’s national regulator for workplace health and safety, the Health and Safety Executive (HSE), was involved in the development of the ISO 45001 standard. The work on this standard had been on-going before the regulator joined, but the HSE helped improve the quality of the standard and make it more useable for small businesses, by reducing its length and improving its clarity. The majority of workplace accidents happen in small businesses, and therefore these standards are needed to help provide a more effective health and safety approach for these businesses.

In the subsequent sections, we present our findings from the literature review and interviews on: (i) the intended outcomes and benefits of ISO 45001; (ii) the realised intermediate outcomes of this IRC initiative; and (iii) the realised long-term economic benefits of the initiative. To inform this case study, we conducted interviews with the HSE, the IOSH (Institution of Occupational Safety and Health) and the BSI (British Standards Institute).

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of ISO 45001 are as follows.

- **Regulatory costs.** The interview respondents considered that regulatory costs may have reduced for some businesses and risen for others as a result of this IRC initiative.

⁸³ Please see: <https://www.iso.org/iso-45001-occupational-health-and-safety.html>

⁸⁴ Please see: <https://www.iso.org/standard/63787.html>

On the one hand, they explained that regulatory costs would be expected to reduce for businesses adopting ISO 45001 for the first time because of its simple framework. On the other hand, they noted that businesses could incur costs associated with: (i) the standard certification process, which needs to be conducted by a third party; and (ii) hiring consultants to help implement the standard. We also found evidence in the literature review suggesting that this initiative was expected to both reduce and increase regulatory costs for businesses at the same time. For example, Gasiorowski-Denis (2018) argued that ISO 45001 would reduce regulatory costs for businesses, as they only need to abide by one set of standards, rather than multiple.⁸⁵ However, a paper by the HSE considered that regulatory costs, particularly for smaller and low risk firms, would increase as a result of this IRC initiative, as complying with ISO 45001 goes “beyond what health and safety law requires”, leading to additional costs for businesses.⁸⁶

- **Regulatory coherence and cross-border regulatory enforcement.** Only one interview participant considered that enhanced regulatory coherence was an intended outcome of ISO 45001, and no interviewees expected cross-border regulatory enforcement to improve. The interviewee argued that ISO 45001 should prevent countries from implementing conflicting health and safety regulations. We also found some evidence in the literature review supporting improved regulatory coherence as an intended outcome of this initiative. For example, Jones (2017) considered that ISO 45001 would give strategic attention, leadership and resources to occupational health and safety management systems worldwide.⁸⁷ The author argued that this would encourage organisations to place greater importance on health and safety standards, which would lead to improved and more aligned regulatory standards across the world.
- **Long-term agreements.** The interview respondents did not consider that the IRC initiative was expected to lead to the establishment of any long-term agreements. However, one interviewee noted that international standards themselves are long-term agreements.

Below, we present evidence of the intended long-term economic benefits of ISO 45001.

- **Trade and foreign direct investment (FDI).** Only one interview participant expected this IRC initiative to increase trade, and no interviewees considered that FDI would increase. In particular, one interviewee argued that ISO 45001 becoming a contractual obligation in large international organisations and across different countries should break down trade barriers. In the literature review, a paper by the HSE argued that ISO 45001 could improve trade.⁸⁸ In particular, given it is an international standard, businesses certified with ISO 45001 in one country ought to be able to understand the health and safety standards of businesses certified with ISO 45001 in another country, thus encouraging trade between these countries.

⁸⁵ ‘Our World with ISO 45001.’ Gasiorowski-Denis (2018).

⁸⁶ ‘Understanding the impact of business health and safety ‘rules.’ HSE (2019).

⁸⁷ ‘ISO 45001 and the evolution of occupational health and safety management systems.’ Jones (2017).

⁸⁸ ‘Understanding the impact of business to business health and safety ‘rules.’ HSE (2019).

- **Productivity and growth.** The interview respondents considered that productivity increases could be an indirect benefit of ISO 45001, but did not expect the initiative to lead to growth. For example, one interviewee considered that ISO 45001 could lead to productivity increases by reducing the number of accidents, ill health occurrences and near-death events, as well as by reducing time off-work and time spent in legal proceedings. Another interviewee expected the benefits of good occupational health and safety (both mental and physical) resulting from ISO 45001 to improve productivity. This expectation that this initiative would lead to productivity increases was confirmed in the literature review. For example, Gasiowski-Denis (2018) explained that ISO 45001 requires both employees and senior management to be involved in the standard implementation process, which increases the visibility of the standard within businesses.⁸⁹ They argued that this helps to prevent workplace accidents, reducing the loss of employee skills and knowledge and therefore improving productivity levels. Additionally, Jones (2017) explained that ISO 45001 should lead to productivity increases, by encouraging business to take a long-term view and improving engagement in health and safety by senior management, as a result of the increased reputational importance of health and safety standards.⁹⁰

In the following sections, we discuss whether these intended outcomes and benefits have been realised, and how well evidenced and certain the realised outcomes and benefits are.

Realised intermediate outcomes

In this section, we discuss evidence of the realised intermediate outcomes of the IRC initiative, based on our findings from the literature review and stakeholder interviews.

- **Regulatory costs.** We found no evidence that regulatory costs have been impacted by ISO 45001. As explained previously, the expected impact of the initiative on regulatory costs is unclear, as evidence suggests that ISO 45001 was expected to reduce regulatory costs for some businesses and increase these costs for others. Indeed, previous research into the adoption of standards in general, i.e. beyond just health and safety, indicates that the costs and benefits of standards to businesses net off.⁹¹
- **Regulatory coherence and cross-border regulatory enforcement.** We did not find any evidence that ISO 45001 has improved regulatory coherence or cross-border regulatory enforcement. Improved cross-border regulatory enforcement was not an expected outcome of this initiative, whereas enhanced regulatory coherence was expected according to the literature and one interview participant. We did not find any

⁸⁹ 'Our World with ISO 45001.' Gasiowski-Denis (2018).

⁹⁰ 'ISO 45001 and the evolution of occupational health and safety management systems.' Jones (2017).

⁹¹ Cebr found that the economic benefits resulting from the implementation and use of standards translated into £8bn of GBP in 2013, whilst the Federation of Small Businesses found that the annual financial costs to small businesses from the adoption of standards is approximately £8bn. Please see: (i) 'The Economic Contribution of Standards to the UK Economy.' Cebr (2015), p.7; and (ii) 'Chain Reaction: Improving the Supply Chain Experience for Smaller Firms.' Federation of Small Businesses (2018), p. 67.

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evidence to support improved regulatory coherence, but as the ISO 45001 was only implemented in 2018, this may still be realised in the future.

- **Long-term agreements.** We found no evidence that indicates that long-term agreements have been established as a result of this IRC initiative. However, it is important to note that this was not an expected outcome of ISO 45001.
- **Uptake of the IRC initiative.** The interviewees considered that the uptake of the IRC initiative has increased. They explained that 60 countries were involved in the initial development of the standard, compared to 77 countries participating in (and 37 countries observing) further developments to the standard. Additionally, one interviewee explained that ISO 45001 is one of the top three implemented international standards in the world and has become a basis for legislation in some countries.

In summary, aside from an increase in uptake of the initiative, there is little available evidence to suggest that ISO 45001 led to intermediate outcomes. Indeed, the interviewees indicated that they were not certain of any realised outcomes of ISO 45001, noting that limited quantitative evidence was available at this stage. This is likely because the standard was only finalised three years ago, and suggests that the availability of limited evidence on realised intermediate outcomes may be due to the recency of the IRC initiative.

Realised long-term benefits

Here, we discuss evidence of the realised long-term economic benefits of this IRC initiative from our literature review and stakeholder interviews.

- **Trade and FDI.** The interview participants did not provide evidence that trade and FDI have been impacted by ISO 45001. As explained previously, the initiative was not expected to lead to FDI, whereas the literature and one interviewee considered that the IRC initiative was expected to lead to increased trade.
- **Productivity and growth.** The interview participants did not provide evidence that productivity and growth have been impacted by ISO 45001, despite increased productivity being an expected benefit of the initiative.

Therefore, we found no available evidence that the IRC initiative led to long-term economic benefits. We expect this is due to the relative recency of this initiative. Indeed, the interview respondents were not certain of the realised benefits of this IRC initiative at this stage. One interviewee argued that the benefits of the initiative are still being realised, highlighting that the IRC initiative was only finalised in 2018. Additionally, another interviewee considered that, since ISO 45001 replaced the previous British standard (BS08SOS 18001), some of the benefits that would have occurred as a result of ISO 45001 had already been achieved by the previous standard.

Overall, the interviewees considered that the impacts of the initiative were not 'one-off'. In particular, one interview participant highlighted that the overall framework of ISO 45001 would need to be continually reviewed and updated, which would help ensure its impacts persisted. Another interviewee explained: "provided the business that has implemented the standard

Impacts of International Regulatory Cooperation (IRC) initiatives

keeps to what it has implemented, the benefits will be continuing”. Finally, one interviewee explained that improving health and safety improves other business areas, and so the benefits are dynamic.

Case Study: Access Consortium

The Access Consortium comprises a group of medical regulatory authorities aiming for international regulatory cooperation between members. We found evidence that there has been an increase in the uptake of the initiative and a political benefit to the UK as a result of the IRC initiative. However, since the UK's regulatory authority only joined the Access Consortium in 2020, the long-term outcomes and benefits of the IRC initiative are unlikely to have been fully realised for the UK economy at this stage.

Overview

The Access Consortium is a coalition of medical regulatory authorities that work together to promote greater regulatory collaboration and alignment of regulatory requirements. It consists of several working groups, with initiatives in a variety of areas, including: (i) assessment reports for medical products; (ii) development of technical guidelines and regulatory standards; and (iii) post-market surveillance of therapeutic products' safety. The consortium aims for increased regulatory alignment and sharing of the most up-to-date technical expertise between its members, particularly with increased globalisation leading to more multinational therapeutic products and the emergence of new products. Its overarching objective is: "to maximise international cooperation between partners in the consortium, reduce duplication, and increase each agency's capacity to ensure patients have timely access to high quality, safe and effective therapeutic products".⁹²

The original consortium was formed in 2007 by four countries, Australia, Canada, Singapore, and Switzerland, under the name "ACSS". In October 2020, the UK's Medicines and Healthcare products Regulatory Agency (MHRA) subsequently joined, becoming the fifth member and the name changed to "Access".

In the following sections, we present our findings from the literature review and interviews for this case study. We first discuss the intended impacts of the Access Consortium, before exploring the realised intermediate outcomes and long-term economic benefits of this IRC initiative. To inform this case study, we conducted interviews with: (i) the Faculty of Pharmaceutical Medicine (FPM), which is a membership body for doctors across all aspects of medicine development; (ii) the Association of British Pharmaceutical Industry (ABPI), which is the trade association for the innovative division of pharmaceutical companies; (iii) Eisai, a Japanese-based innovative pharmaceutical company; and (iv) the British Generic Manufacturers Association (BGMA).

⁹² Please see: <https://www.gov.uk/guidance/access-consortium>

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of the Access Consortium are as follows.

- **Regulatory costs.** The interview participants expected the Access Consortium to reduce regulatory costs for both countries and businesses. They explained that, if regulations were harmonised between countries, this would remove the need for duplication of effort, and governments and businesses would not need to spend as much time and money on their regulatory submissions. The literature confirmed this as it found that this IRC initiative was expected to reduce regulatory costs for both countries and businesses. For instance, Acha (2017) argued that, if the regulatory approach across countries was coordinated, this would reduce costs for governments and companies.⁹³ This is because regulatory tests would not need to be duplicated, as products would only need to pass one test which would be recognised across countries. A paper by the Access Consortium also argued that increased regulatory alignment resulting from the IRC initiative would mean companies do not need to duplicate tests across multiple jurisdictions, which would reduce regulatory costs for businesses.⁹⁴ Additionally, the paper considered that, if regulators could share resources and expertise, this would help reduce the time required for products to receive regulatory approval, thus reducing the time-aspect of regulatory costs.
- **Regulatory coherence and cross-border regulatory enforcement.** The interview participants expected regulatory coherence to improve as a result of the IRC initiative, but did not expect cross-border regulatory enforcement to be impacted. Indeed, the interview participants explained that regulatory coherence, in terms of streamlining and harmonising the process, was an intended outcome of the initiative. However, one interviewee noted that other bodies had been working together to improve regulatory coherence in the pharmaceutical sector before the implementation of the Access Consortium. The literature suggests that improved regulatory coherence and cross-border regulatory enforcement were expected outcomes of the IRC initiative. For example, a paper by the Access Consortium considered that aligning regulatory approaches to therapeutic goods was an aim of the consortium.⁹⁵ The paper also argued that, if regulators share lessons learnt and best practice with one another, this can also help improve future regulatory enforcement.
- **Long-term agreements.** The interview participants did not agree on whether long-term agreements were an expected outcome of the Access Consortium. Only one interviewee expected the IRC initiative to lead to the establishment of long-term agreements. They argued that the Access Consortium represents a “stepping stone” that can be used to achieve more substantial agreements, based on mutual recognition.
- **Trade and foreign direct investment (FDI).** The interview participants did not consider that increased trade and FDI were intended benefits of this IRC initiative.

⁹³ ‘Breaking up the band: European regulatory cooperation in a post Brexit world.’ Acha (2017).

⁹⁴ ‘Access Consortium Strategic Plan 2021-2024.’ Access Consortium (2021).

⁹⁵ ‘Access Consortium Strategic Plan 2021-2024.’ Access Consortium (2021).

- **Productivity and growth.** The interviewees did not agree on whether productivity was an expected benefit of the IRC initiative, and none considered that growth was an intended benefit. Some interview participants expected the Access Consortium to increase productivity, since businesses would only need to conduct regulatory tests in one country as opposed to in all five member states, meaning that research would be more efficient. However, other interview participants did not consider productivity to be an intended benefit of the IRC initiative.

In the following sections, we discuss whether these intended outcomes and benefits have been realised, and how well evidenced and certain the realised outcomes and benefits are.

Realised intermediate outcomes

Here, we present evidence of realised intermediate outcomes of the Access Consortium.

- **Regulatory costs.** We found no evidence that regulatory costs have been impacted by the IRC initiative, despite reduced regulatory costs being an expected outcome of the initiative. This is likely due to the fact that the MHRA only joined the Access Consortium in 2020.
- **Regulatory coherence and cross-border regulatory enforcement.** We did not find evidence to support the IRC initiative resulting in improved regulatory coherence and cross-border regulatory enforcement. This is likely due to the recency of the MHRA joining the Access Consortium. The interviewees explained that its members considered regulatory coherence had been achieved following other regulatory initiatives in the sector, but could not provide any evidence in relation to Access Consortium. As explained previously, improved regulatory coherence was an expected outcome of the initiative according to both the literature review and interviews, whereas enhanced cross-border regulatory enforcement was expected only according to the literature review.
- **Long-term agreements.** We found no evidence of long-term agreements being established as a result of the IRC initiative. It is important to note that only one interviewee considered this to be an expected outcome of the Access Consortium.
- **Uptake of the IRC initiative.** Evidence from the stakeholder interviews indicates that the uptake of the IRC initiative has increased. Indeed, one interview participant explained that Brazil is due to join the Access Consortium.
- **Political impact.** There has also been a political impact of the Access Consortium, with the interview participants considering that the Access Consortium “definitely has a political dimension”. They explained that there is a benefit to the UK from being seen to work with others, from a diplomacy perspective.

“Access Consortium definitely has a political dimension”

In summary, we found limited evidence of realised intermediate outcomes arising from this initiative. Evidence from the interviews suggests that the uptake of the IRC initiative has increased and that the UK has benefited politically from the initiative. As the UK only joined the Access Consortium in 2020, the realised outcomes of the IRC initiative are unlikely to have been fully realised yet. In particular, the interview participants from FPM considered that the impacts of the Access Consortium are not well evidenced. They further explained that the intended impacts of the initiative are only hypothetical and drawn from realised impacts in other regulatory initiatives. One interviewee considered that the success of the initiative would be dependent on the extent of the commitment of the countries involved. If this is realised, the interviewee considered that the realised outcomes would be substantial.

Realised long-term benefits

In this section, we discuss evidence of the realised long-term economic benefits of the IRC initiative.

- **Trade and FDI.** We found no evidence to support trade and FDI being impacted by the IRC initiative. It is important to note that these were not expected benefits of the IRC initiative. One interviewee also argued that there were too many factors influencing trade, meaning that it was not possible to attribute any trade effects to the Access Consortium.
- **Productivity and growth.** We did not find evidence that productivity and growth have increased as a result of the Access Consortium. This is likely attributable to the fact that the MHRA only joined the IRC initiative in 2020. As explained previously, growth was not an expected benefit of the initiative and the interviewees disagreed as to whether the initiative was expected to increase productivity.

Overall, we found no evidence of realised long-term economic benefits resulting from the IRC initiative. However, since MHRA only joined the Access Consortium in 2020, the benefits of the IRC initiative are unlikely to have been fully realised yet. As explained in the previous section, the interviewees from the FPM considered that the impacts of the initiative are not well evidenced.

The interviewees agreed that the impacts of the Access Consortium should persist, and not be 'one-off'. However, they noted that this would be dependent on the experience that companies have of working with regulators and the consortium in the next few years, as this would impact upon the extent of future engagement with the consortium and whether its impacts persist. The interviewees expected the impacts of the initiative to be dynamic, as regulatory affairs are very intertwined with other areas of the pharmaceutical industry, meaning that benefits may also extend to other areas. They also considered that if other countries joined the consortium this would create large and lasting benefits.

Case Study: IAF

The International Accreditation Forum's (IAF) primary objective is to limit the duplication of accreditation by ensuring mutual recognition of accredited certification statements between signatories to the Multilateral Recognition Agreement. Overall, we found evidence of long-term economic outcomes arising from this IRC initiative – particularly through increases in international trade driven by the reduction in technical barriers to trade.

Overview

Standards establish repeatable, agreed and documented ways of doing something. They are wide-ranging in their reach, for example, they include: (i) IT security standards to help secure sensitive information; (ii) energy management standards to help reduce the consumption of energy; and (iii) quality management standards to ensure that products work more efficiently and have a lower risk of failure. Standards are the culmination of the knowledge of experts who generate a consensus on how a practice should be undertaken. Organisations such as inspection bodies, certification bodies and laboratories are responsible for checking compliance and conformity with these standards, by providing services such as testing, inspection, and certification.

The role of accreditation bodies is to provide independent, third party assessments of the competence of these abovementioned organisations to conduct compliance and conformity assessments. The IAF, founded in 1993, is a worldwide association of accreditation bodies. It currently has 87 members, including the United Kingdom Accreditation Service (UKAS). The IAF is responsible for setting up a Multilateral Recognition Agreement (MLA) between accreditation bodies. The MLA is an agreement of mutual recognition between signatories to the MLA, meaning that, once accepted, an accreditation certification awarded by one member will be accepted in all member countries. Indeed, the mandate of the IAF includes the statement: “certified once - accepted everywhere”.⁹⁶ To become a signatory to the MLA, each accreditation body must undergo stringent peer evaluations to ensure that it complies with IAF standards. The objective of this IRC initiative is to: “ensure mutual recognition of accredited certification and validation/verification statements between signatories to the MLA”.⁹⁷

In the subsequent sections, we present our findings from the literature review and interviews on: (i) the intended outcomes and benefits of the IAF; (ii) the realised intermediate outcomes of this IRC initiative; and (iii) the realised long-term economic benefits of the initiative. To inform this case study, we conducted interviews with UKAS, the Association of British Certification Bodies (ABCB), and the Independent International Organisation for Certification (IIOC).

⁹⁶ Please see: <https://www.oecd.org/gov/regulatory-policy/IAF%20profile.pdf>; p. 2.

⁹⁷ Please see: <https://iaf.nu/en/about-iaf-mla/>

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of the IAF are as follows.

- **Regulatory costs.** We found evidence in the literature that the IAF's MLA was expected to reduce compliance and implementation regulatory costs for member states' businesses and regulatory authorities respectively. For example, Blind et al (2018) explained that, because signatories to the MLA are required to accept accreditation certificates from other IAF member countries, this prevents members from having to reassess the quality of imported products.⁹⁸ They argued that this was expected to lead to a reduction in regulatory costs, due to the eradication of duplicate certification. The interviewees confirmed that the IAF was expected to reduce regulatory costs through removing duplication. One interviewee stated that the IAF could be used as both a substitute and complement to regulation, as it enables regulators to adopt a system that is "off-the-shelf", therefore reducing costs for regulators.
- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees considered that the IAF was expected to improve regulatory coherence, but not cross-border regulatory enforcement. In particular, one interviewee explained that the intention of the MLA was to build a strong foundation to improve regulatory coherence between signatories.
- **Long-term agreements.** The interviewees considered that the IAF's MLA was a long-term agreement, but did not consider that any further agreements were expected to arise as a result of this IRC initiative. However, they noted that the initiative may lead to the establishment of various trade agreements, as the MLA acts to improve quality assurance and confidence across borders.

Below, we present evidence of the intended long-term economic benefits of the IAF.

- **Trade and foreign direct investment (FDI).** The interviewees considered that reducing barriers to trade was one of the central purposes of the IAF's MLA, and so expected this IRC initiative to increase trade. In particular, they explained that the MLA was expected to increase trade between MLA signatories by improving quality assurance and confidence. This view was confirmed in the literature review. For example, Blind et al (2018) argued that countries import less when they are unsure of quality, whereas trade flows rise when credible quality assurance is received.⁹⁹ The paper explained that an intended benefit of the IAF was to provide consumers and companies with a reliable quality indicator, and so was expected to increase trade flows. Denkler (2014) argued that, because the IAF removes the need for certification in other countries, it reduces barriers to trade between IAF member states.¹⁰⁰ In addition, a paper by the IAF explained that the IRC initiative should encourage firms to set up more

⁹⁸ 'The effects of cooperation in accreditation on international trade: Empirical evidence on ISO 9000 certifications.' Blind, Mangelsdorf and Pohlisc (2018).

⁹⁹ 'The effects of cooperation in accreditation on international trade: Empirical evidence on ISO 9000 certifications.' Blind, Mangelsdorf and Pohlisc (2018).

¹⁰⁰ 'The International System of Quality Infrastructures – national approach and international collaboration.' Denkler (2014).

global supply chains, as businesses can be more confident in the consistency of standards.¹⁰¹

- **Productivity and growth.** The interviewees expected that the initiative would lead to productivity increases. In particular, they explained that, by making the accreditation process less time consuming, the IAF's MLA would improve business productivity.

In the next sections, we discuss whether these intended outcomes and benefits have been realised, and how well evidenced and certain these are.

Realised intermediate outcomes

Here, we present our findings on the realised intermediate outcomes of the IRC initiative.

- **Regulatory costs.** The interviewees did not consider that regulatory costs have been impacted by the IRC initiative, despite a reduction in regulatory costs being an expected outcome of the IAF. One interviewee from ABCB believed the certification process was more costly than it should be under a properly implemented MLA, noting that “the cost of accreditation is enormous”. The interviewee explained that, if the MLA worked in the way the IAF intended it to, a UK-based business with operations abroad should not have to send UKAS members to carry out inspections, as it should instead be utilising local certification authorities. This example shows the opportunity for the IAF MLA to significantly reduce certification costs in the future and is something that the IRC initiative should continue to strive towards.



“The cost of accreditation is enormous”

- **Regulatory coherence and cross-border regulatory enforcement.** The interviewees did not identify any evidence that the IRC initiative has led to improved regulatory coherence and cross-border regulatory enforcement. As explained previously, enhanced regulatory coherence was an expected outcome of the IAF.
- **Long-term agreements.** The interviewees did not consider that any long-term agreements have been established as a result of the IAF's MLA. However, it is important to note that this was not an expected outcome of the initiative.
- **Uptake of the IRC initiative.** The interviewees considered that the uptake of the IRC initiative has increased. They explained that the number of signatories to the MLA had gradually increased. In particular, they noted that the global reach of the MLA, beyond the boundaries of the large developed nations, now also includes countries such as China, Pakistan and Kazakhstan. This was considered a particularly promising step for the MLA.

¹⁰¹ 'Accreditation: Adding Value to Supply Chains.' IAF (2020).

In summary, aside from the increase in update of the IRC initiative, we found no evidence of any realised outcomes arising from the IAF's MLA.

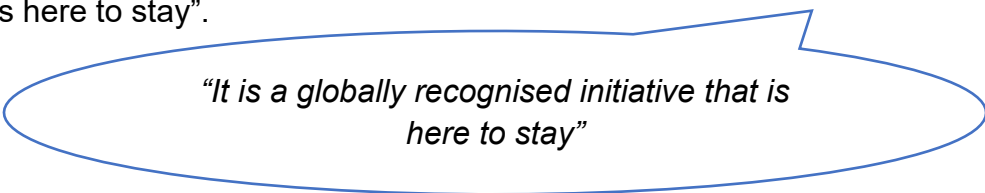
Realised long-term benefits

In this section, we discuss evidence of the realised long-term economic benefits of the IRC initiative, based on our findings in the literature review and the interviews.

- **Trade and FDI.** The interviewees were unable to point to any evidence of trade being impacted by the IRC initiative, despite increased trade being an intended benefit of the IAF's MLA. However, the literature did provide some examples where this benefit has been realised. For example, Blind et al. (2018) found that members of the IAF enjoyed increased levels of trade compared to countries who had not joined, based on the results of their regression analysis.¹⁰² Based on results from a number of econometric regression models, the paper concluded that IAF membership has a statistically significant positive effect on trade for exporting countries. For importing countries, the paper found that the results are less clear, but that the more sophisticated regression models indicate that IAF membership has a statistically significant positive effect on trade. The authors also found that the positive impact of IAF membership on trade is larger for exporting countries than for importing countries, based on the coefficients from the regression models. In addition, a report by the IAF pointed to research conducted by the Centre for Economics and Business Research (CEBR) in the UK, where they stated that £6.1 billion of additional UK exports per year could be attributed to standards and accreditation conformity.¹⁰³ The CEBR further reports that the IAF removes arbitrary national technical barriers to trade and improves confidence and transparency in complex and multinational supply chains.
- **Productivity and growth.** The interviewees were also unable to identify any evidence of productivity and growth being impacted as a result of the IAF MLA. As explained previously, the initiative was expected to lead to productivity increases.

Therefore, we found some evidence of long-term benefits arising from the IAF's MLA. This is evidenced by the literature findings that the initiative had: (i) increased trade between IAF members; and (ii) led to increased UK exports.

Overall, the interviewees considered that the impacts of the MLA would persist and were not 'one-off'. The interviewees felt the additions of new countries to the MLA were the beginning of a promising future for the initiative. One interviewee noted that: "it is a globally recognised initiative that is here to stay".



"It is a globally recognised initiative that is here to stay"

¹⁰² 'The effects of cooperation in accreditation on international trade: Empirical evidence on ISO 9000 certifications.' Blind, Mangelsdorf and Pohlisc (2018).

¹⁰³ 'Accreditation: Adding Value to Supply Chains.' IAF (2020).

Case Study: DMAS

The Digital Market Access Service (DMAS) aims to remove barriers that may be preventing UK businesses from trading and investing abroad. Overall, we found evidence that DMAS has improved regulatory coherence and cross-border regulatory enforcement and led to the establishment of long-term agreements, such as the India free-trade partnership. Evidence also indicates that the IRC initiative has increased trade between the UK and other countries. As DMAS was only implemented in 2019, we expect that the full extent of outcomes and benefits is yet to be fully realised.

Overview

The Department for Internal Trade (DIT) undertakes work aiming to improve market access abroad for UK business. This is intended to remove individual tariff and non-tariff barriers, and outward foreign direct investment (FDI) restrictions that may be hindering firms from trading and investing effectively. DMAS was launched by the Bilateral Trade Relations Directorate of DIT, intending to remove the need for offline reporting of trade barriers.

DMAS comprises: (i) an online tool, which UK businesses can report market access barriers that they are facing; and (ii) an online information source, enabling UK businesses to track these barriers. DMAS allows government officials that work on market access to resolve these trade barriers that have been reported by UK firms. The potential barriers faced include unnecessary, legal, regulatory or administrative requirements that a regulator or government has imposed that can be detrimental to exports or overseas investments. This includes labelling restrictions, out-of-date regulations and licensing requirements related to any industry that UK businesses are engaged in abroad. The purpose of this IRC initiative is to: “ensure British businesses can flag these issues and the government’s trade experts can work with countries around the world to resolve them.”¹⁰⁴

In the subsequent sections, we present our findings from the literature review and interviews on: (i) the intended outcomes and benefits of DMAS; (ii) the realised intermediate outcomes of this IRC initiative; and (iii) the realised long-term economic benefits of the initiative. To inform this case study, we conducted an interview with five members of DIT.

The interviewees from DIT cited the main intended outcomes of DMAS as: (i) increasing the reporting of market access barriers; (ii) improving the speed of the resolution of these barriers; (iii) replacing the offline processes for recording and managing market access barriers; (iv) improving knowledge sharing between DIT staff and staff in other locations around the world; and (v) increasing business-intelligence gathering and generating key insights using the data to drive trade policy. Despite these being the main intended outcomes of DMAS, in order to compare the intended and realised outcomes and benefits across IRC initiatives, we have

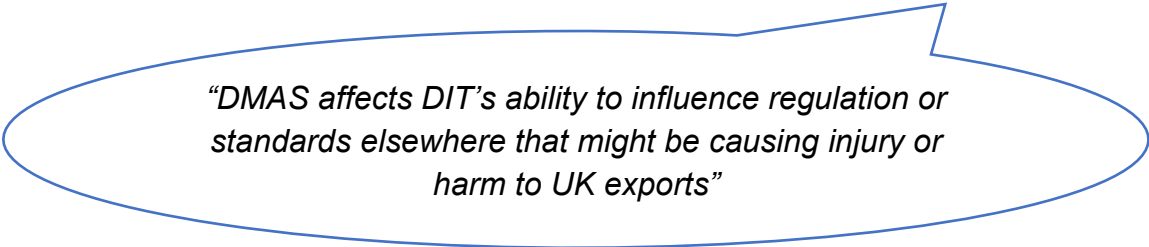
¹⁰⁴ Please see: <https://www.gov.uk/government/news/new-service-to-open-overseas-markets-for-uk-businesses>

assessed the DMAS against a set of common impacts across initiatives. These are described below.

Intended outcomes and benefits

Our findings on the intended intermediate outcomes of DMAS are as follows.

- **Regulatory costs.** The interviewees expected the IRC initiative to reduce regulatory costs for businesses. They explained that, by removing trade barriers associated with complying with international regulations, DMAS would be expected to reduce regulatory costs for UK business. However, they noted that market access barriers that impeded economic growth would be prioritised over barriers relating to regulatory costs.
- **Regulatory coherence and cross-border regulatory enforcement.** The interview participants considered that improved regulatory coherence and cross-border regulatory enforcement were expected outcomes of DMAS. They explained that the IRC initiative provides a government-wide method for tracking barriers and allows for a more targeted intervention with other governments. The interview respondents also stated that “DMAS affects DIT’s ability to influence regulation or standards elsewhere that might be causing injury or harm to UK exports”. This means that DIT would be able to ensure that regulatory standards that are currently imposed in other countries, and are preventing UK exports from being competitive, are removed and subsequent standards are consistent with those in the UK. This could lead to improved regulatory coherence and improved cross-border regulatory enforcement.



“DMAS affects DIT’s ability to influence regulation or standards elsewhere that might be causing injury or harm to UK exports”

- **Long-term agreements.** The interview respondents expected DMAS to lead to the establishment of that long-term agreements between the UK and other countries. They explained that these could include free-trade agreements.

Below, we present evidence of the intended long-term economic benefits of the initiative.

- **Trade and foreign direct investment (FDI).** The interview respondents considered that improved trade and FDI were key intended benefits of DMAS. This was confirmed in the literature review. For example, a press release by DIT argued that British exports would be less competitive than locally produced goods and services, and could even be banned in some jurisdictions, if market access barriers were not removed.¹⁰⁵ Therefore, by removing these barriers, the IRC initiative is expected to improve the competitiveness

¹⁰⁵ ‘New service to open overseas markets for UK businesses.’ DIT (2019).

of British exports, which should result in increased trade. Additionally, a press release by DIT explained that analysis by the British government showed that British exports could increase by £75 billion per year as a result of liberalising market access barriers.¹⁰⁶

- **Productivity and growth.** The interview respondents considered that increased productivity and growth were not primary intended benefits of DMAS, but expected these benefits to arise if market access barriers were removed as a result of DMAS.

In the next sections, we discuss whether these intended outcomes and benefits have been realised, and how well evidenced and certain the realised outcomes and benefits are.

Realised intermediate outcomes

In this section, we present evidence of realised intermediate outcomes of DMAS.

- **Regulatory costs.** Likely due to the recency of the IRC initiative, we found no evidence that regulatory costs have reduced as a result of DMAS. As explained previously, the initiative was expected to reduce regulatory costs for businesses.
- **Regulatory coherence and cross-border regulatory enforcement.** Evidence from the interviews and literature review indicates that regulatory coherence and cross-border regulatory enforcement have both improved as a result of the IRC initiative. The interview participants explained that over 300 barriers were removed in the first two full financial years after DMAS was introduced. In the literature, this was confirmed in DIT's 2020/21 annual report. The report explained that, of the 787 market access barriers that were reported during that financial year, 246 of these had been resolved (188 in full and 58 in part).¹⁰⁷ In addition, a press release by DIT explained that 175 trade barriers had been resolved across 61 countries in 2019/20, with all these barriers being reported on DMAS.¹⁰⁸
- **Long-term agreements.** The interviewees considered that long-term agreements have resulted from DMAS. They provided an example of the India free-trade partnership. However, the interviewees noted that, since market access work is very broad, it is challenging to know which long-term agreements can be attributed to DMAS .

Therefore, we found evidence that regulatory coherence and enforcement have improved and that long-term agreements have arisen as a result of DMAS. We note that our findings are based on evidence from both interview participants and the literature review.

¹⁰⁶ 'Trade barriers removed to boost business.' DIT (2020).

¹⁰⁷ 'Annual Report and Accounts 2020-21 (for the year ended 31 March 2021).' DIT (2021).

¹⁰⁸ 'Trade barriers removed to boost business.' DIT (2020).

Realised long-term benefits

Here, we discuss evidence of the realised long-term economic benefits of the IRC initiative, based on our findings in the literature review and the interviews.

- **Trade and FDI.** Evidence from both the interviews and literature review suggests that trade has increased as a result of DMAS. Indeed, the interview participants explained that removing market access barriers had reduced costs for British businesses and made UK exports cheaper and more competitive, which had increased trade. They noted that business testimony evidence from DIT indicates that firms are now able to undertake business activities that they could not previously do, as a result of DMAS. In addition, the interviewees explained that the value of markets within which the over 200 abovementioned barriers fell amounted to £150 billion, which affected £2.9 billion of UK exports. In the literature review, there was case study evidence that DMAS generated significant monetary benefits to the UK. A press release by DIT presented several examples of market access barriers that had been reported on DMAS that were liberalised in 2019/20. This included the removal of a ban on exports of beef and lamb to Japan, which was worth an estimated £127 million over the first five years of access.¹⁰⁹ Other examples were provided, specifically: (i) the removal of strict labelling rules on products to the United Arab Emirates (UAE) allowed sports nutrition company, Grenade, to export to the UK's largest export market in the Middle East; and (ii) making it easier for British fisherman to export products, e.g. salmon, to Brazil.
- **Productivity and growth.** We found no evidence that productivity and growth have been impacted by DMAS, despite these being expected benefits of the initiative. This is likely due to the relative recency of DMAS.

In summary, evidence from both interview participants and the literature review suggests that trade has increased as a result of DMAS. The interviewees explained that they were certain of the benefits of DMAS, based on business testimony evidence thus far. However, they noted that there is a lack of evidence on the full benefits of the initiative. In particular, there has been no ex-post impact analysis of DMAS and so there is no overall figure for the impact that removing the barriers has had on UK exports. The interview respondents considered that the lack of evidence may also be due to the relative recency of the initiative, meaning that economic benefits may not yet have materialised.

Overall, the interview participants considered that the impacts of DMAS should persist and not be 'one-off'. They explained that benefits should continue to grow, as new barriers that need to be resolved will continue to arise.

¹⁰⁹ 'Trade barriers removed to boost business.' DIT (2020).

Thematic review

In this Chapter, we present a ‘thematic review’ of IRC initiatives. Drawing on the evidence presented in the case study Chapters, as well as evidence from interviews with stakeholders providing cross-cutting perspectives on IRC, we set out our overarching conclusions on the economic impacts of IRC initiatives. In doing so, we answer the research questions that were investigated as part of this study.

In addition to the case study-based evidence presented in the previous Chapters, the thematic review was informed by two interviews conducted with stakeholders that provided cross-cutting perspectives on IRC initiatives. These interviewees included contributors to the Organisation for Economic Cooperation and Development’s (OECD) ‘Review of International Regulatory Cooperation of the United Kingdom’ report¹¹⁰, as well as former senior policy advisors from the Better Regulation Executive (BRE).

The three key research questions that were investigated as part of this study are presented below.

- **RQ1:** Did the IRC initiatives lead to any intermediate outcomes, such as reducing regulatory costs, achieving greater regulatory coherence, improving cross-border regulatory enforcement, or leading to the establishment of any long-term agreements with other countries? If so, how and by how much did they change?
- **RQ2:** Did the IRC initiatives lead to long-term economic benefits, such as increased trade, foreign direct investment (FDI), productivity or growth? If so, how and by how much did they change?
- **RQ3:** Are benefits ‘one-off’ or will they persist? Does one benefit give rise to another?

In the rest of this Chapter, we present overall conclusions based on our findings, before discussing the following four themes and outlining opportunities for improving the evidence base through the use of monitoring and evaluation. In themes 2 to 4, we answer the key research questions set out above.

- **Theme 1:** IRC is expected to deliver both intermediate outcomes and long-term economic benefits.
- **Theme 2 – RQ1:** There is some evidence of realised outcomes from IRC initiatives.
- **Theme 3 – RQ2:** Limited evidence is available on realised benefits of IRC.
- **Theme 4 – RQ3:** Impacts of IRC initiatives are not expected to be one-off.

¹¹⁰ ‘Review of International Regulatory Co-operation of the United Kingdom.’ OECD (2020).

Overall conclusions

IRC initiatives have been successfully implemented in the UK against their objectives and so we expect these to have delivered a number of positive impacts for the UK economy. These impacts include both intermediate outcomes, such as reductions in regulatory costs and the establishment of long-term agreements with other countries, and long-term economic benefits, such as improvements in productivity, growth and trade. The impacts of IRC initiatives are also not expected to be 'one-off' and are expected to persist.

Overall, there is strong appetite for participating in IRC globally. In particular, we found ample evidence of increases in the uptake of initiatives, following their implementation. However, whilst positive impacts are expected, through our literature review and stakeholder interviews we found that there is currently limited available evidence in terms of the realised impacts of initiatives. Due to this lack of available evidence, it is not possible to fully determine the true extent of the impacts noted in the project research questions (i.e. in relation to realised economic benefits).

We understand that this lack of available evidence is consistent with findings from initial research conducted by the BRE. We expect the evidence gap is partly due to some of these initiatives being too recent for any realised outcomes and benefits to have been achieved. However, this is also likely due to the inherent challenges of assessing the impacts of these initiatives, as set out below.

- Some initiatives, such as the ISO 45001 standard on health and safety, have less direct links to economic benefits. In other words, a number of different stages are required for improvements in health and safety to lead to economic benefits. In these cases, it is therefore expected to be challenging to identify the direct or indirect economic benefits arising from initiatives, due to the multitude of other stages that economic benefits are dependent on.
- Relatedly, achieving long-term economic benefits, such as growth or FDI, is generally not the primary objective of IRC initiatives studied in this project, with some initiatives having limited connections to economic benefits. As a result, it is difficult to identify or isolate economic benefits from these initiatives, even if the logic chain is followed through. For example, the objective of the 2018 London IWT Conference is to reduce illegal wildlife trade, and so this initiative is likely to have had bigger impacts on environmental issues and crime, rather than having led to long-term economic benefits, such as increasing productivity or leading to growth. Notwithstanding this, one may expect some economic spill overs from this.
- We also note that the impacts of IRC initiatives are more difficult to evaluate from a methodological perspective than other interventions. Indeed, it is challenging to establish a clear counterfactual scenario to assess the impact of the initiatives, due to the eco-system level of these initiatives.

Theme 1: IRC is expected to deliver both intermediate outcomes and long-term economic benefits

IRC initiatives have been successfully implemented in the UK against their objectives and we expect these to have delivered a number of positive impacts for the UK economy. These impacts include both intermediate outcomes and long-term economic benefits.

In relation to intended intermediate outcomes, evidence shows that IRC should: (i) reduce regulatory costs, for both businesses and countries; (ii) improve regulatory coherence and cross-border regulatory enforcement between governments; and (iii) lead to the establishment of long-term agreements with other countries. The mechanisms through which these outcomes are expected to arise are set out below.

- **Regulatory costs.** By improving regulatory cooperation and standardising regulations between countries, IRC initiatives are expected to reduce regulatory costs, both at the business- and at the country-level. At the business-level, regulatory cooperation between countries reduces: (i) information-related costs, associated with researching regulations in other countries; (ii) specification costs, of having to adapt to regulations in other countries; and (iii) conformity costs, associated with demonstrating compliance with regulations in other countries. At the country-level, regulatory cooperation reduces: (i) costs of complying with other countries' regulations; and (ii) costs for countries of researching and setting up their own regulations, as they are able to implement international regulations. However, since the UK has been actively engaging in the process of setting up international regulations through these IRC initiatives, we consider the latter mechanism for reducing regulatory costs is less relevant for the UK but demonstrates the UK's role as a global leader in IRC. As an example, the Access Consortium was expected to reduce regulatory costs for both businesses and governments by harmonising regulations between member states, but it was not expected to reduce costs associated with researching and setting up regulations for members states.
- **Regulatory coherence and cross-border regulatory enforcement.** IRC initiatives are expected to improve regulatory coherence and cross-border regulatory enforcement between countries by increasing cooperation, harmonising legislation and sharing ideas and lessons learnt between countries participating in initiatives. International standards and regulations that result from IRC initiatives will also improve regulatory coherence and enforcement between countries who implement these. For example, in the RPAS Panel case study, we found that enhanced regulatory coherence and cross-border regulatory enforcement were "central to the Panel's purpose" and "absolutely" expected to arise, according to the current and former RPAS Panel members we interviewed.
- **Long-term agreements.** IRC initiatives are generally expected to lead to the creation of international standards and regulations in the form of long-term agreements between countries, thus demonstrating global commitments to improving the regulatory environment across various sectors. Further to this, by bringing together subject matter experts and countries to discuss regulatory issues, IRC initiatives are expected to lead

to other long-term agreements on related issues. For example, the 2018 London IWT conference was expected to lead to the establishment of long-term agreements between the UK and other countries both during and after the conference – in particular, it was hoped countries and other attendees would pledge funding to reduce illegal trade and sign the conference’s London Declaration.

IRC initiatives are also expected to lead to long-term economic benefits. In particular, these initiatives are expected to increase trade links and FDI, as well as drive improvements in productivity and sectoral growth. The mechanisms through which these economic benefits are expected to arise are described below.

- **Trade and FDI.** Improving regulatory alignment between countries is expected to increase trade and FDI. In particular, by reducing costs associated with complying with regulations in other countries, both businesses and countries are more likely to engage in international trade and investment as this will be more commercially attractive. In addition, improved regulatory coherence is expected to increase demand between countries and open up the possibility of trade in goods and services which are aligned to international regulations. For example, in the IOSCO case study, we found that this initiative was expected to increase trade and FDI, by improving regulatory coherence between member states.
- **Productivity and growth.** IRC is expected to drive productivity improvements and sectoral growth. Improving regulatory cooperation between countries means that businesses incur fewer costs associated with regulatory compliance. This implies that business can deploy resources elsewhere, leading to productivity improvements and growth. For example, the GFIN initiative was expected to lead to productivity and growth, as firms would be able to divert their cost bases away from regulatory-related issues.

Theme 2 – RQ1: There is some evidence of realised outcomes from IRC initiatives

In this section, we present our findings on the first key research question, RQ1. As set out below, we found some available evidence of intermediate outcomes being realised from IRC initiatives.

- We found ample evidence of increases in the uptake and participation in IRC initiatives globally, following their implementation. For example, the number of countries participating in the GFIN has increased. For the IAF case study, we found that there has been an increase in the number of IAF members and signatories to the Multilateral Recognition Arrangement.
- We also found evidence of long-term agreements being set up as a result of IRC initiatives. For the example, the London Declaration was signed at the 2018 London IWT conference. In the IOSCO case study, the initiative led to 125 out of 159 members

signing a Multilateral Memorandum of Understanding (MMoU), as well as 20 members signing a supplementary Extended MMoU (EMMoU) agreement.

- In relation to regulatory costs, as well as regulatory coherence and enforcement, we found little available evidence of the realised outcomes of initiatives. For example, in the OECD International VAT/GST Guidelines case study, one interviewee explained that “it is difficult to quantify whether this has been achieved in practice” when discussing whether regulatory costs had been impacted. In the Access Consortium case study, interview participants considered that improved regulatory coherence had been achieved, but explained that they could not provide any confirmation of this as evidence was not available.
- In some case studies, we found evidence to suggest that outcomes had not yet been realised. For example, in the RPAS Panel case study, the interview participants considered that improvements in regulatory coherence and cross-border regulatory enforcement had not yet been achieved from the IRC initiative, as work was still on-going.

Theme 3 – RQ2: Limited evidence is available on realised benefits of IRC

Here, we present our findings on the second key research question, RQ2. We found that very limited evidence was available on the realised long-term economic benefits of initiatives. As explained previously, we expect this is due to a number of reasons, including the inherent challenges of assessing the initiatives’ impact and their recency. We summarise the available evidence below.

- In the DMAS case study, we found evidence that the IRC initiative had increased trade. For example, one study by DIT found that the lifting of beef and lamb export restrictions to Japan led to an estimated £127 million increase in trade during the first five years of the tool, prior to the implementation of the UK-Japan Comprehensive Economic Partnership Agreement (CEPA) free-trade agreement.¹¹¹ However, no further estimation methodology was provided so it difficult to conclude whether £127 million can be fully attributed to this initiative.
- In the IAF case study, we found evidence that trade had increased as a result of the initiative. For example, Blind et al. (2018) undertook regression analysis using the United Nation’s COMTRADE database and found that members of the IAF enjoyed increased levels of trade compared to countries who had not joined.¹¹² In addition, based on previous research by the Centre for Economics and Business Research (CEBR), a report by the IAF argued that £6.1 billion of additional UK exports per year

¹¹¹ ‘Trade barriers removed to boost business.’ DIT (2020).

¹¹² ‘The effects of cooperation in accreditation on international trade: Empirical evidence on ISO 9000 certifications’. Blind, Mangelsdorf and Pohlisc (2018).

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could be attributed to standards and accreditation conformity.¹¹³ However, the report did not attribute these benefits directly to the IRC initiative itself.

- In the IOSCO case study, we found evidence that IOSCO had resulted in liquidity improvements. Indeed, Silvers (2020) found that, as a result of IOSCO's MMoU, home shares (cross-border shares traded in local markets) experienced liquidity improvements of 6-9%, whilst host shares (cross-border shares listed in foreign markets) experienced liquidity improvements of 25-30%.¹¹⁴
- In some cases, we found that evidence of realised long-term economic benefits was difficult to relate to the IRC initiative in question. For example, in the CAC case study, one paper found that food exports had increased from \$23 billion in 1963, when the CAC was formed, to \$1,119 billion in 2013 – however, the study did not attribute this increase in trade to the IRC initiative.¹¹⁵ In the Access Consortium case study, one interviewee suggested that there were too many factors influencing trade, meaning that it was not possible to attribute any trade effects to the Access Consortium.

Theme 4 – RQ3: Impacts of IRC initiatives are not expected to be one-off

In this section, we answer the third key research question, RQ3. That is: are benefits 'one-off' or will they persist? Does one benefit give rise to another?

Evidence suggests that the impacts of IRC initiatives are not expected to be 'one-off' and are expected to persist. Indeed, nearly all interview participants that we spoke to considered that the impacts of the IRC initiatives would not be one-off. Some examples are provided below.

- In the OECD VAT/GST Guidelines case study, the interviewees explained that this initiative helps create a continuous revenue stream for the UK government and so, in this sense, helps deliver persistent benefits for the UK economy.
- The GFIN was expected to deliver dynamic impacts, due to increased engagement and understanding between different regulators.
- In the RPAS Panel case study, the respondents considered that the initiative enables long-term international cooperation between countries, which delivers lasting benefits.
- The interviewees from the OECD noted that "inherently, regulation is a very dynamic phenomenon" and explained that they expected the impacts of IRC initiatives to persist. The former senior policy advisors also considered that the impacts of IRC would be dynamic.

"Inherently, regulation is a very dynamic phenomenon"

¹¹³ 'Accreditation: Adding Value to Supply Chains'. IAF (2020).

¹¹⁴ 'Cross-border cooperation between securities regulators.' Silvers (2020).

¹¹⁵ 'Trade and Food Standards.' Food and Agriculture Organization of the United Nations and World Trade Organizations (2017).

Opportunities

As set out in the previous sections, the evidence on the actual, tangible impacts that IRC initiatives have had on the UK economy is limited. Following the UK's withdrawal from the EU, the responsibility for the UK's regulatory policy has returned to UK government departments and regulators. There is therefore an opportunity for these decision-making bodies to better consider the realised benefits of IRC and use this knowledge to both: (i) effectively include international cooperation in the UK regulatory structure; and (ii) support successful future engagement in IRC. We have identified two opportunities for improving the evidence base.

- Firstly, greater focus could be placed on establishing the evidence on the actual impacts of existing IRC initiatives on the UK economy, by embedding monitoring and evaluation practices for these initiatives. For example, for initiatives where these practices are already in place, efforts could be directed at improving the quality of monitoring and evaluation, through improved data collection.
- Secondly, when setting up future IRC initiatives, clear direction could be given on who bears the responsibility of 'tracking' the realised impacts of initiatives through the use of monitoring and evaluation.

As explained previously, there are inherent challenges in assessing the impacts of IRC initiatives, because economic benefits are generally not the objective of IRC initiatives. This means that these initiatives are somewhat far removed from direct or indirect economic benefits. Impacts of IRC initiatives are also more difficult to evaluate from a methodological perspective than other interventions, due to the challenges of establishing a clear counterfactual scenario.¹¹⁶ The above opportunities should be considered in light of these challenges.

¹¹⁶ BEIS has previously commissioned an exploratory study on policy evaluation methods. This is available here: <https://www.gov.uk/government/publications/alternative-policy-evaluation-frameworks-and-tools-exploratory-study>

Annex A – Interview method

In this Annex, we set out the methodology employed to conduct the interviews. Our approach consisted of two key stages: (i) identifying interview candidates; and (ii) conducting semi-structured interviews. We provide more details on our approach to each of these stages below.

Approach to identifying interviewees

The first stage of our interview process involved identifying appropriate interview candidates. In doing so, we targeted different types of candidates to ensure we spoke to a range of stakeholders. This included:

- individuals within the IRC initiative organisation itself;
- contacts within organisations directly involved with the initiative (such as government departments and regulators);
- ‘customers’ / ‘beneficiaries’ of the IRC (that is, businesses or organisations that were affected by the initiative);
- authors of papers and reports identified in the literature review; and
- contacts provided by the BEIS project team.

After conducting interviews, we also asked interview participants to provide us with any contacts that might be able to provide input to the study.

Once the interview candidates had been identified, we contacted them by email directly. Our email was accompanied by a cover letter from BEIS requesting their participation in the research project and setting out the aims of the study and its importance.

Through this approach, we contacted a total of 102 interview candidates.

Approach to conducting interviews

The second stage of involved conducting interviews with candidates that agreed to participate in the study. The interviews were semi-structured and based around an interview discussion guide, which is available in Annex B. The discussion guide was designed to answer the key research questions of the project. It was sent to interviewees in advance of the interview, to give them time to consider the questions.

We conducted a total of 27 interviews. Some of these were focus-group style interviews with multiple colleagues within the same organisation, whereas others were with one individual.

List of organisations

In this section, we present a list of organisations that we spoke to by case study. We note that some organisations wished to remain anonymous and so have not been named in the table below.

Table 6: List of organisations interviewed

Case study	Organisation	Organisation type
RPAS Panel	Civil Aviation Authority (CAA)	Regulator
	Blue Bear Systems Research	Company
	Altitude Angel	Company
2018 London IWT Conference	Department for the Environment, Food and Rural Affairs (Defra)	UK government department
	University of Northumbria	Academic institution
GFIN	Financial Conduct Authority (FCA)	Regulator
OECD International VAT/GST Guidelines	Her Majesty's Treasury (HMT)	UK government department
	Her Majesty's Revenue and Customs (HMRC)	UK government department
IPSF	UK Sustainable Investment and Finance Association (UKSIF)	Membership organisation
IOSCO	FCA	Regulator
	UK Finance	Trade association
CAC and INFOSAN	Food Standards Agency (FSA)	Non-ministerial government department

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International Convention on Nuclear Safety	Office for Nuclear Regulation (ONR)	Regulator
Standard ISO 45001	Health and Safety Executive (HSE)	UK government agency
	Institution of Occupational Safety and Health (IOSH)	Membership organisation
	British Standards Institution (BSI)	National body
Access consortium	Association of the British Pharmaceutical Industry (ABPI)	Trade association
	Faculty of Pharmaceutical Medicine (FPM)	Membership organisation
	Eisai	Company
	British Generic Manufacturers Association (BGMA)	Trade association
IAF	United Kingdom Accreditation Service (UKAS)	National body
	Association of British Certification Bodies (ABCB)	Trade association
	Independent International Organisation for Certification (IIOC)	Trade association
DMAS	Department for International Trade (DIT)	UK government department

Source: Economic Insight

Annex B – Interview discussion guide

In this Annex, we set out the discussion guide that was used for the interviews.

This document sets out a series of discussion questions that we would like to explore with you. The overall aim of our study is to understand how International Regulatory Cooperation (IRC) initiatives have benefited the UK.

Economic Insight has been commissioned by the Department for Business, Energy and Industrial Strategy (BEIS) to undertake a research project exploring **what impacts IRC initiatives may have had on the UK economy**, through a series of case studies. A key aspect of the project is to conduct interviews with relevant stakeholders.

We intend to conduct interviews on Microsoft Teams. Where this is not possible, they can be conducted by phone. We expect each interview to last around 30 minutes.

Please note, that all information collected will be treated in the strictest confidence.

Nothing that you say will be directly attributed to you as an individual. One of the outputs of this project will be a report published on the gov.uk website, and we would like to include a list of organisations that we spoke to, if you agree to this (we will not disclose any identifying information of you as an individual). Equally so, we are happy for your organisations to remain completely anonymous. You have the right to a copy of your data, change your data or withdraw from the research at any point – if you wish to do so, please contact Economic Insight [redacted]. If you have any further questions, please do not hesitate to contact Economic Insight [redacted] or BEIS [redacted].

The rest of this document sets out discussion questions that we would like to ask you. We are keen to explore interesting aspects as and when they arise, but expect to broadly keep to the structure outlined below.

Introduction

We would first like to ask some introductory questions to better understand how you and/or your organisation relate to the IRC initiative.

- Could you give a brief overview of the organisation you represent? Alternatively, if you are an academic, please explain your area(s) of expertise.
- Could you provide a brief explanation of the IRC initiative in question?
- Could you explain how you and/or your organisation relate to the IRC initiative?
 - Are you and/or your organisation directly involved in implementing the IRC initiative?
 - Are you and/or your organisation a 'customer' / 'beneficiary' of the IRC initiative?

Intended benefits of IRC

We are interested in understanding the intended benefits of the IRC initiative – that is, the mechanisms by which the IRC initiative was expected to deliver economic benefits.

- Prior to the IRC initiative being implemented, what were the hypotheses / expectations of the economic impacts of the initiative? Through what mechanisms were these benefits expected to have arisen?
 - Was the IRC initiative expected to reduce regulatory costs? If so, please explain how.
 - Was the IRC initiative expected to improve regulatory coherence and cross-border regulatory enforcement, between the UK and the countries in scope of the IRC? If so, please explain how.
 - Was the IRC initiative expected to lead to the establishment of any long-term agreements with other countries? If so, please explain how.
 - Was the IRC initiative expected to increase sectoral trade links and/or foreign direct investment, between the UK and the countries in scope of the IRC? If so, please explain how.
 - Was the IRC initiative expected to contribute to productivity increases and/or the growth of the sector? If so, please explain how.

Realised benefits and outcomes of IRC

We are also interested in understanding what the actual impacts of the IRC have been, and how well evidenced / certain they are.

- Once the IRC initiative was implemented, do you think there were any realised economic benefits of the initiative?
 - Did the IRC initiative impact regulatory costs? If so, how and by how much did they change?
 - Did the IRC affect regulatory coherence and cross-border regulatory enforcement, between the UK and the countries in scope of the IRC?
 - Did the IRC lead to the establishment of any long-term agreements with other countries? If so, what were these?
 - Did the IRC initiative affect sectoral trade links and/or foreign direct investment, between the UK and the countries in scope of the IRC? If so, how and by how much did they change?
 - Did the IRC initiative impact productivity and/or the growth of the sector? If so, how, by how much and where in the UK?

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- Do you think the impacts of the IRC are 'one-off', or do you think will they persist? Does one benefit give rise to another?
- How certain are you of the benefits of the IRC initiatives? How well evidenced do you think these benefits are?
 - Have the benefits been robustly quantified?
- What other outcomes have been achieved following the implementation of the IRC?
 - Have the number of countries participating in the IRC initiative increased?

End of interview

- Would we be able to contact you again to clarify any points raised in this discussion, or to ask more in-depth questions?
- Do you know of any other stakeholders, within your organisation or outside of it, that would be able to provide input to this research project? If so, please can you provide us with their contact information?
- Are you happy for your organisation to be named as having participated in the research in the report published on the gov.uk website.

Annex C – Literature review method

In this Annex, we set out the methodology employed to conduct the literature review for this research project. Our approach consisted of two key stages: (i) developing a systematic search strategy to identify literature; and (ii) conducting an in-depth review of the selected literature. We provide more details on our approach to each of these stages below.

Approach to identifying literature

The first step of our literature review was to establish a systematic search strategy to identify literature which answers the specified project research questions. The strategy adopted was to identify and agree on consistent search terms, before using these terms to search through databases and download the available papers that met our inclusion criteria.

Firstly, we compiled lists of key words and synonyms for use within our search. In doing so, we included key words that allowed us to search for answers to the specified research questions. Examples of the search terms we used are set out below, and the list of search strings used for each case study is included in Annex D.

- [IRC name] + UK benefit
- [IRC name] + UK economic impact
- [IRC name] + impact on trade
- [IRC name] + impact on investment

Next, we used these search terms to consult both Google and Google Scholar databases. This allowed us access to a wide range of literature, including academic research papers, grey literature, private sector reports and reports by trade bodies.

Finally, we applied a rigorous inclusion and exclusion criteria to the studies returned during our database search, to identify which papers should be downloaded for further review. This helped ensure that the quality of evidence drawn from the literature review was as robust as possible. The criteria employed is detailed in the table overleaf.

Table 7: Inclusion and exclusion criteria

Criteria type	Detail
Inclusion	Relevant to answering research questions
	Written in English
	Published by a reputable source
Exclusion	Student paper, dissertation, unpublished work
	Published prior to 2000

Source: Economic Insight

Through this approach, we identified a total of 41 papers for review across the 12 case studies.

Approach to reviewing literature

Once the relevant literature had been identified, the next step involved conducting an in-depth review of the studies and using this evidence to answer the specified research questions.

In doing so, we employed the template set out overleaf. This template was designed to ensure the evidence collected from the literature answered the project research questions. It further distinguished between the intended and realised impacts of the IRC initiative. In addition to this, we also developed an excel ‘matrix’ that enables cross-referral and comparisons of the literature across case studies, which is included as an Annex to this report.

Table 8: Literature review template

IRC initiative:
Title:
Author(s):
Date:
Type:
Source:
Overview: <i>This summarises the paper’s aim and its methodology.</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <p><i>This section sets out the high-level mechanisms identified by the paper on how the IRC would deliver economic benefits. Particular mechanisms to look for include:</i></p> <ul style="list-style-type: none"> • <i>Does the IRC lead to greater regulatory coherence and enforcement?</i> • <i>Has the IRC intensified trade links?</i> • <i>Has the IRC increased FDI between the countries involved?</i> • <i>Has the IRC facilitated productivity improvements?</i> • <i>Have the initial agreements led to further long-term agreements</i>
<p>Realised benefits of the IRC:</p> <p><i>This section records evidence presented in the paper on the benefits of the IRC and how these have been determined. Our focus is to look for the following benefits:</i></p> <ul style="list-style-type: none"> • <i>Has the IRC contributed to growth (GVA, investment, employment) in the sector?</i> • <i>Are the benefits of the IRC one-off or persistent?</i> • <i>Has the IRC reduced regulatory cost?</i> • <i>How much has the IRC increased trade?</i> • <i>Has the scheme led to future agreements?</i> • <i>Has the policy generated benefits for citizens/ businesses?</i>
<p>Outcomes of the IRC:</p> <p><i>This section records evidence presented in the paper on the outcomes that have been achieved from the adoption of the IRC initiative.</i></p>

Source: *Economic Insight*

Annex D – Literature review by case study

In this Annex, we present the completed literature review templates by case study.

Case Study: RPAS Panel

Overview

The International Civil Aviation Organisation (ICAO) formed a technical panel in 2014 to develop international regulations for Remotely Piloted Aircraft Systems (RPAS). The CAA has been part of the RPAS Panel since 2014. Since forming, the RPAS Panel has published the RPAS Manual in 2015 and is currently in the process of developing Standards and Recommended Practices (SARPs) for RPAS.¹¹⁷

The objective of this IRC is “to facilitate a safe, secure and efficient integration of remotely piloted aircraft (RPA) into non-segregated airspace and aerodromes”.¹¹⁸

Literature review

Search terms to identify literature on this topic were as follows:

- icao "RPAS" Panel uk impact
- icao "RPAS" Panel uk economic benefit
- icao "RPAS" manual uk impact
- icao "RPAS" sarps uk impact
- rpas international regulation benefits uk

IRC initiative: <i>RPAS Panel</i>
Title: <i>The regulation of civilian drones' impacts on public safety</i>
Author(s): <i>Clarke and Moses</i>
Date: <i>2014</i>
Type: <i>Academic paper</i>
Source: <i>Computer Law and Security Review</i>

¹¹⁷ Please see: <https://www.icao.int/Newsroom/Pages/ICAO-Council-makes-progress-on-new-remotely-piloted-aircraft-system-RPAS-standards.aspx>

¹¹⁸ Please see: [https://www.icao.int/safety/UA/Pages/Remotely-Piloted-Aircraft-Systems-Panel-\(RPASP\).aspx](https://www.icao.int/safety/UA/Pages/Remotely-Piloted-Aircraft-Systems-Panel-(RPASP).aspx)

<p>Overview: <i>This paper conducts a review of current and emerging regulations of civilian drones, via a literature review.</i></p>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none">• Through a review of existing regulations, the paper finds that most countries do not have standards on drone operations. On this basis, it concludes that countries may be waiting for ICAO before adopting their own regulations on drones. The authors note that the benefit of waiting is that each country does not have to incur costs associated with researching and implementing their own regulations (which would need to be revised in any case once ICAO's standards are established). However, they argue that there is a risk of harm to public safety from lack of regulation in the meantime, based on their review of literature.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none">• The paper does not provide evidence on the realised benefits of the IRC.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none">• The paper does not provide evidence on the outcomes of the IRC.

Case Study: 2018 London IWT Conference

Overview

In 2018, the UK convened the largest ever global illegal wildlife trade (IWT) conference at which 65 countries signed up to the London Declaration. The objective of this declaration was to take coordinated action to tackle the illegal wildlife trade. Cooperation should help to address the significant detrimental economic, environmental, security and social impacts that the trade presents.

Literature review

In addition to the articles in the OECD review of regulatory cooperation and the government's response to this article, we located other relevant literature for this topic using the following search terms:

- London illegal wildlife conference 2018 impacts
- UK response to London illegal wildlife conference
- illegal wildlife trade fund UK benefits

<p>IRC initiative: <i>2018 London IWT Conference</i></p>

Title: <i>London Conference on the Illegal Wildlife Trade (October 2018): Declaration</i>
Author(s): <i>DEFRA</i>
Date: <i>2018</i>
Type: <i>Government</i>
Source: <i>DEFRA</i>
Overview: <i>This paper is a summary of the agreement that the signatories signed up to. The purpose of the initiative is to protect endangered species, and tackle the organised crime and corruption that drives the trade that poses a security risk to the global population</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • Based on the initiatives that proved to be successful following the previous three IWT conferences, the paper states that the solution to tackling the illegal wildlife trade can be broken into three sections: (i) tackling crime; (ii) addressing local livelihood issues; and (iii) and reducing demand. • Based on the CITES resolutions, tackling crime can be broken down into two sections: (i) improving enforcement; and (ii) tackling financial flows created by the trade. They aim to coordinate law enforcement by creating common legal frameworks and strengthening penalties for those involved. They plan to tackle financial flows by pooling investigation resources and information to improve the identification of the criminals involved. Again, the intention is to strengthen anti-corruption and money-laundering legislation to tackle this. Bilateral agreements can also be used to better regulate trade of natural resources in the future. • To address local livelihoods, the plan is to fund sustainable jobs that directly benefit from the wildlife trade, and involve the local communities in enforcing wildlife protection. The authors conclude that communities are only resorting to IWT because they have no other alternative to earn an income from the income. By providing locals with an alternative, it should reduce their need to resort to IWT. • To reduce demand, specific campaigns will be conducted to achieve behavioural changes by educating communities. Currently, this is the least resourced option. The Convention intends to place greater emphasis on this approach going forwards. However, the authors agree further research is required to determine the most effective methods to accomplish this.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the outcomes of the IRC.

IRC initiative: <i>2018 London IWT Conference</i>
Title: <i>Illegal Wildlife Trade Challenge Fund: List of projects</i>
Author(s): <i>DEFRA</i>
Date: <i>2015</i>
Type: <i>Government</i>
Source: <i>DEFRA</i>
Overview: <i>This paper provides a summary of each individual project that the UK has funded to tackle the illegal wildlife trade. The paper provides evidence on the countries involved, a summary of the purpose of each project, its budget and duration.</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The purpose of each grant is either to: (i) generate sustainable livelihoods for communities in developing countries in order to provide them with an alternative to engaging in IWT; (ii) or to help to fund enforcement measures to prevent IWT. • Each project aims to create incentives for the local community to protect their wildlife resources. The theory of these funds is that, by providing local communities with alternative livelihoods that are sustainable, they will not be forced to engage in IWT to earn an income. In addition, the fund wants to exploit their superior local knowledge to set up more effective enforcement schemes than national or international agencies could create. • It is important to note that the paper does not provide evidence to support this theoretical link between sustainable livelihoods and a reduction in IWT.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • Following the launch of this funding initiative, UK aid has contributed £26 million to 85 projects since 2013 (and 27 projects since 2018). Each project provides investment and employment to local communities. They all contribute to addressing the criminal activity of IWT which is worth £17 billion.

IRC initiative: <i>2018 London IWT Conference</i>
Title: <i>More Than Words: Are Commitments To Tackle Illegal Wildlife Trade Being Met?</i>
Author(s): <i>IIED</i>

Date: 2019
Type: <i>Policy and action research</i>
Source: <i>IIED</i>
Overview: <i>This paper analyses the achievements of the three previous IWT conferences compared to their aims. It assesses the historic success of programs that aim to tackle IWT through law enforcement, demand reduction and alternative livelihoods. The paper does this by analysing the reported progress that each country has made addressing each of the factors against their stated commitments.</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The paper uses both the TRAFFIC seizure data and the combined funding data from the World Bank analysis to identify how countries of concern are progressing. However, the authors say this method is not ideal. They would have preferred to have country-level annual progress reports. Without these, the paper admits that its conclusions and those of other studies are not robust. • To achieve further progress, the paper recommends it is necessary to improve data collection (through country-level annual reports) to make tracking progress easier, address the imbalance in geographical coverage of investments, and address the imbalance in thematic coverage. • The paper argues that without access to better evidence of what has been achieved, it is only able to cite the same general benefits as other papers: (i) reduction in organised crime; (ii) improved opportunities for the private sector; and (iii) the creation of sustainable jobs for local communities.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • As mentioned above the paper finds that very little data is available on realised benefits and funding. Where it is available, it is not consistently reported, making drawing comparisons difficult.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • By allocating 65% of the \$1.3 billion available World Bank funding to law enforcement between 2010 and 2016 (and 83% since 2016), progress has been made in this area, by increasing the number of skilled rangers, establishing national cross-agency coordination and collaboration, and strengthening regional and global enforcement networks. • The paper finds the least progress has been made around demand reduction. Focus has been placed on tightening import and export controls, and collaborating across the supply chain to make the trading of illegal products more difficult. To make further progress, greater importance should be placed on achieving behavioural change.

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- Very little progress has been reported around sustainable livelihoods. This could be because most of the funding linked to this is combined with funding for law enforcement, meaning insufficient resource is available to achieve sustainable livelihood goals.

IRC initiative: <i>2018 London IWT Conference</i>
Title: <i>Conservation and crime convergence? Situating the 2018 London Illegal Wildlife Trade Conference</i>
Author(s): <i>Masse et al</i>
Date: <i>2018</i>
Type: <i>Academic</i>
Source: <i>Northumbria University</i>
Overview: <i>This paper analyses how speakers at the London Conference focussed on law enforcement as the primary tool for tackling IWT. It describes methods they planned to use to toughen up law enforcement, what the implications of these methods would be, and assesses how they came to their conclusions.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none">• The three core objectives of the scheme are: (i) tackling IWT as a serious organised crime; (ii) building coalitions; and (iii) closing markets.• The conference was concerned about the finding of UNODC's Global Programme for Combatting Wildlife and Forest Crime that there was a shift towards more global organised crime. A popular mechanism discussed to combat this was the standardisation of laws and penalties (e.g. poaching penalties) against wildlife crime. These would include coordination in closing markets, and providing greater investigation powers (e.g. undercover investigation, surveillance, informants).• To combat these organised criminals, speakers wanted a greater emphasis placed on tracking financial crime to allow them to catch the criminals in charge instead of just those directly engaging in IWT. The strategy behind this is that, by catching those in charge of the criminal organisations, they could dismantle the network of gangs long-term, instead of just addressing the immediate problem.• They also proposed to introduce trade bans on wildlife products. They believed this would make produce harder to get hold of, and to hopefully reduce demand for it as access became more difficult.• Technological solutions were also promoted, such as camera traps, remote-controlled cameras, drones, remote sensing systems, and surveillance of mobile phone communication. These would provide cost effective enforcement measures

<p>and could increase their coverage. This should make it easier to capture the criminals involved and act as a greater deterrent.</p> <ul style="list-style-type: none"> • These technological solutions enable private sector firms to enter. The paper argues that these firms would bring a different way of thinking to tackling IWT as they will be incentivised with access to a new market. They hope this could lead to a different approach where new, previously untried solutions were attempted. Giving the private sector greater access would create export opportunities for the UK. • Speakers at the conference did not provide evidence to support their claims on how trade bans and technological solutions could reduce IWT.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the outcomes of the IRC.

<p>IRC initiative: <i>2018 London IWT Conference</i></p>
<p>Title: <i>UK aid to crack down on criminal gangs driving the illegal wildlife trade</i></p>
<p>Author(s): <i>DFID</i></p>
<p>Date: <i>2018</i></p>
<p>Type: <i>Government</i></p>
<p>Source: <i>DFID</i></p>
<p>Overview: <i>This paper details the Wildlife Financial Taskforce’s strategy of cracking down on the criminal gangs behind IWT. It describes the organisations that will be involved in the taskforce, the tools that they plan to use and the outcomes that they hope each of these tools will accomplish.</i></p>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • A group of government, regulators, and over 30 banks and financial organisations will launch investigations, seize assets and train law enforcement officers in African countries to crack down on financial crimes associated with the illegal wildlife trade. The article believes that, by having such a large number of actors involved, the use of sanctions (e.g. asset freezing and visa bans) will be more effective, and more resources will be in place to run parallel investigations. • In practice, this will involve tracing the money sent from Africa by suspected groups across borders to increase the number of successful prosecutions. There will be

coordination between domestic and international action so that both low-level poachers and the high-level bosses can be prosecuted.

- The method will not only be effective in reducing the illegal wildlife trade, but it should also tackle other criminal enterprises, such as drugs and weapons.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The emphasis placed on law enforcement has enabled local forces to conduct more operations at greater scale. For example, the paper explained that, in Indonesia, the unit had undertaken over 150 sting operations in 2017, involving over 200 traffickers, poachers, smugglers and dealers. 95% of those apprehended were prosecuted, and 77% received penal sentences.

Case Study: GFIN

Overview

The Global Financial Innovation Network (GFIN) was launched in 2019, and encompasses over 60 different jurisdictions. It builds upon the FCA's initial global sandbox project from 2018. The purpose of the GFIN is to provide firms with a more efficient mechanism to interact with regulators that encourages them to innovate. Specifically, it gives them the ability to test new products, services or business models across borders so that they can tell if the concept works in different markets under varying jurisdictions.

The objective of this IRC (GFIN) is: "to provide a more efficient way for innovative firms to interact with regulators, helping them navigate between countries as they look to scale new ideas".¹¹⁹

Literature review

In addition to the articles in the OECD review of regulatory cooperation and the government's response to this article, we located other relevant literature for this topic using the following search terms:

- GFIN
- GFIN FCA six month trial results
- GFIN UK benefits
- GFIN impact on UK
- UK fintech bridges impact

¹¹⁹ Please see: <https://www.fca.org.uk/firms/innovation/global-financial-innovation-network>

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- FCA regulatory sandbox

IRC initiative: <i>GFIN</i>
Title: <i>The Global Financial Innovation Network reflects on its first year</i>
Author(s): <i>GFIN</i>
Date: <i>2019</i>
Type: <i>Regulatory article</i>
Source: <i>GFIN</i>
Overview: <i>This paper analyses the evidence of how the GFIN has performed in its first year against its three main objectives: (i) acting as a collaborative group of regulators to share experience of innovation; (ii) providing a forum for joint work; and (iii) enabling firms to trial cross-border solutions. Performance against these goals was assessed by the feedback that the GFIN received.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none">• The paper states that the focus of the GFIN is to give regulators a space to discuss and provide innovative firms with an opportunity to test their products.• They aim to provide easily accessible information so it is easy for firms to both access support and release information on their products.• The GFIN also ran a cross-border pilot that allowed firms to trial and scale up new products across multiple jurisdictions. Feedback they received was that, although the pilot made it easier for firms to grow across multiple markets, inefficiencies between jurisdictions meant it was not as effective as it could have been.• The GFIN expects that as their knowledge base grows, they will be able to leverage this expertise to provide greater benefit to new firms.• The paper argues that the GFIN's flexibility allows it to serve to different firms and markets with varying priorities. Given the rate of change in the fintech sector, the paper argues maintaining this adaptability will be crucial.
Realised benefits of the IRC: <ul style="list-style-type: none">• The paper does not provide evidence on the realised benefits of the IRC.
Outcomes of the IRC: <ul style="list-style-type: none">• Evidence of the demand for the cross-border pilot was that the GFIN received 40 applications of which only eight could be accepted.

IRC initiative: <i>GFIN</i>
Title: <i>Regulatory Sandboxes in the UK and Singapore: A Preliminary Survey</i>
Author(s): <i>Chen</i>
Date: <i>2019</i>
Type: <i>Academic</i>
Source: <i>Regulating Fintech in Asia: Global Context</i>
Overview: <i>This article contrasts the FCA’s approach to sandboxing with Singapore’s, and explains how it impacts upon the GFIN. The article then provides analysis of the benefits and concerns of regulatory sandboxing.</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The paper argues that sandboxing increases the interaction between regulators and firms. They provide regulators with the opportunity to analyse new products before they are released. This early insight enables regulators to properly assess the innovation and risks of new products. This should stop them from having to be as reactive, and make it less likely that they are forced to impose a “one-size fits all” regulatory approach that stifles innovation. • The paper also argues that sandboxes provide firms with greater visibility of regulatory risk and liability that is posed by product innovation. It also gives them a clearer idea of the market entry and exit criteria. Having improved knowledge of the risks and rewards they face should incentivise greater innovation that can benefit the market. • However, sandboxes can pose risks. As firms involved in them are less tightly regulated, this could send signals to the market that either: (i) the product is not carefully controlled causing consumers to lose confidence in it; or (ii) consumers have false confidence in the product because they believe it is endorsed by the regulator. To avoid this it is necessary to strike a balance between protecting consumers and encouraging firms to innovate. • Secondly, the paper argues that, to be most effective, different jurisdictions should coordinate. Although the GFIN does this to an extent, it admits it could coordinate to a greater degree.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • There is evidence that the initiative helps firms to successfully bring their products to wider markets. In its initial sandboxing trial, the FCA revealed that “75% of firms

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accepted into the first cohort (77% for second cohort) had successfully completed testing and that around 90% of the firms that completed testing in the first cohort continued to develop wider markets”.

IRC initiative: <i>GFIN</i>
Title: <i>The Impact of the Regulatory Sandbox on the Fintech Industry, with a Discussion on the Relation between Regulatory Sandboxes and Open Innovation</i>
Author(s): <i>Goo, J.J.; Heo, J.-Y</i>
Date: <i>2020</i>
Type: <i>Academic</i>
Source: <i>Interdisciplinary Program of Management of Technology</i>
Overview: <i>This paper conducts empirical analysis to understand the impact of regulatory sandbox adoption on the scale of investments in fintech. It analyses how fintech investment has varied across a range of countries, including the UK, since they introduced a sandbox program. The paper does this by analysing how the expected effects of sandboxes contrast to the realised outcomes. It uses this to predict the impact of regulatory sandboxes on the industry going forwards.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none">• The results of this analysis show that all countries that engaged in sandboxing “show a remarkable increase in the size of venture investment” in fintech. The paper argues this investment is very important in reaching “early-stage industrial maturity”.• The paper argues that sandboxes reduce both legal and institutional risk. By providing business friendly regulation, governments help to create sustainable innovation that can continue to benefit consumers in the long-run.
Realised benefits of the IRC: <ul style="list-style-type: none">• The paper does not provide evidence on the realised benefits of the IRC.
Outcomes of the IRC: <ul style="list-style-type: none">• There is evidence from investment data that demonstrates that regulatory sandboxes contribute towards creating an open innovative system and increase UK investment. In the UK, 30% of venture companies that graduated from the regulatory sandbox received venture investment, and the average investment amount increased 6.6 times.

IRC initiative: <i>GFIN</i>
Title: <i>The impacts of technological innovation on regulatory structure: Fintech in post-crisis Europe</i>
Author(s): <i>Agnieszka Smoleńska, Joseph Ganderson and Adrienne Héritier</i>
Date: <i>2020</i>
Type: <i>Academic</i>
Source: <i>Governing finance in Europe</i>
Overview: <i>This paper analyses how the events of the last decade have impacted upon the policy and regulatory decisions that are currently being made surrounding the financial innovation sector. It conducts empirical analysis to determine the political and strategic motives behind these decisions, and the outcomes the actors are hoping to achieve.</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The GFIN aims to enable knowledge pooling between regulators, facilitate joint work on RegTech, and create a cross-border environment for product trials. Its aim is to provide UK entrepreneurs with a comprehensive regulatory environment unmatched elsewhere in Europe. • The paper states that the FCA believes the scheme stimulates domestic competition for consumers. This should give them access to innovative products. • The paper believes the scheme provided a clear signal that the UK was open to fintech investment. The GFIN builds on national sandboxes by representing “a simultaneous deepening and widening of its activities”. It allows customers to conduct testing on their innovations on real customers whilst operating under reduced regulatory constraints and thus less risk of facing enforcement action, all whilst receiving on-going guidance from regulators. • The paper believes that the cross-border and international cooperation focus of GFIN would allow UK established firms to expand seamlessly. Given the UK is already a fintech leader, this would give them a competitive advantage. • The paper argues that the FCA’s position as chair of the GFIN allows it to coordinate a formal network with a ‘hub and spoke’ model, thus expanding its influence and becoming an international standard setter. Combining this control with the UK’s market leading position in fintech would give UK-based fintech firms an advantage.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
Outcomes of the IRC:

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- The paper does not provide evidence on the outcomes of the IRC.

IRC initiative: <i>GFIN</i>
Title: <i>Regulatory Sandboxes and Innovation Hubs for FinTech</i>
Author(s): <i>Policy Department for Economic, Scientific and Quality of Life Policies</i>
Date: <i>2020</i>
Type: <i>Academic</i>
Source: <i>European Parliament</i>
Overview: <i>This paper analyses the success of various regulatory sandboxes, including the GFIN, that have been set up to attempt to help regulators to keep abreast of the rapid technological development in the financial sector. The paper analyses these initiatives by identifying certain key elements of the design and operational parameters of innovation facilitators.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none">• The paper argues that the expected benefit of sandboxes is that they provide improved regulatory understanding of new products. This allows regulators to have more time and knowledge in developing suitable policies to mitigate the risks of these technologies. As the GFIN encourages knowledge pooling, this awareness can be shared across jurisdictions creating better global policy.
Realised benefits of the IRC: <ul style="list-style-type: none">• The paper does not provide evidence on the realised benefits of the IRC.
Outcomes of the IRC: <ul style="list-style-type: none">• This paper notes that although the theory supporting the GFIN is positive, it does still have limitations, potentially because it is a new initiative. Of the eight firms involved in the cross-border trial that was run in 2019, none managed to provide a testing plan that would satisfy the testing conditions of all the jurisdictions concerned. This demonstrates that, although they had the ability to try to scale products across multiple jurisdictions, these jurisdictions were not suitably aligned to enable products to be seamlessly introduced to the market.

IRC initiative: *GFIN*

Title: <i>The Financial Conduct Authority's Innovation Journey: Moving Forward in the Face of Uncertainty</i>
Author(s): <i>Amy Friend</i>
Date: <i>2021</i>
Type: <i>Academic</i>
Source: <i>AIR</i>
Overview: <i>This paper analyses how the FCA has set up the successful TechSprints. It gathers evidence by conducting stakeholder interviews</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The paper argues TechSprints allow regulators to reposition themselves as “active listeners”, who will participate with firms to help to deliver solutions for consumers. This change of role enables them to engage more actively at early stages. • The paper claims that TechSprints enable emerging technology learnings and solutions to be developed much more quickly. By bringing together key regulatory, academic and market stakeholders to collaborate for a restricted period of time, it helps to create solutions that would not otherwise have been generated. The process also helps them to be rapidly scaled and brought to market. • The paper argues that running these events signals regulatory interest in the issues facing the industry. The authors think this helps regulators to forge new relationships and partnerships, which will help them to build powerful networks across domestic and international jurisdictions.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • The first TechSprint produced tangible results. The event helped to establish new methods of identification and tools that simplified the user’s digital experience.

Case Study: OECD International VAT/GST Guidelines

Overview

The Organisation for Economic Cooperation and Development (OECD) developed international Guidelines on Value Added Tax (VAT) / Goods and Services Tax (GST) in 2014. Her Majesty's Revenue and Customs (HMRC) helped develop these Guidelines, which are intended to help create a consistent international framework.

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The objective of this IRC is: “reducing the uncertainty and risks of double taxation and unintended non-taxation that result from inconsistencies in the application of VAT/GST in a cross-border context”.¹²⁰

Literature review

Search terms to identify literature on this topic were as follows:

- oecd vat guidelines uk impact
- oecd international vat guidelines uk impact
- oecd international vat guidelines impact
- oecd international vat guidelines impact on trade
- oecd international vat guidelines impact on investment
- oecd international vat guidelines uk benefits

IRC initiative: <i>OECD International VAT/GST Guidelines</i>
Title: <i>The OECD International VAT/GST Guidelines: past and future developments</i>
Author(s): <i>Charlet and Buydens</i>
Date: <i>2012</i>
Type: <i>Academic</i>
Source: <i>World Journal of VAT/GST Law</i>
Overview: <i>This paper provides an overview of the OECD’s work on international VAT Guidelines, prior to their finalisation in 2014. It summarises both the origins of the OECD’s work on VAT, as well as the status of the organisation’s current work, through a literature review.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none">• The paper asserts that differences in approaches to VAT between countries did not have a significant impact when international trade was limited, but does not provide evidence to support this. The authors argue that, with the growth of international trade, differences in approaches need to be addressed via international Guidelines to avoid double or non-taxation.• The authors cite analysis from a 2004 OCED report on the application of consumption taxes to the trade in international services and intangibles, which

¹²⁰ Please see: ‘International VAT/GST Guidelines.’ OECD (2017); 5; p.11.

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shows that differences in approaches to VAT between jurisdictions hindered business activity, economic growth and competition.

- Based on previous survey evidence, the paper finds that differences in approaches to VAT between countries (e.g. differences in the procedures for VAT relief or recovery) may also lead to significant compliance and administration costs for businesses and governments. To support this, they cite an OECD survey from 2010, which found that one third of businesses said difficulties associated with VAT relief or recovery influenced investment decisions.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The paper does not provide evidence on the outcomes of the IRC.

IRC initiative: *OECD International VAT/GST Guidelines*

Title: *Global Developments in VAT/GST - Overview and Outlook*

Author(s): *O'Sullivan*

Date: *2018*

Type: *Grey literature*

Source: *OECD Presentation*

Overview: *This is a presentation slide-pack by the OECD, which summarises available evidence to provide an update on global developments in VAT/GST.*

Mechanisms by which the IRC could give economic benefit:

- The presentation states that international VAT standards are required to ensure that: (i) taxes accrue to the destination country; (ii) double taxation and non-taxation are avoided; and (iii) burdens are minimised for businesses. It explains that the risk arising from non-taxation is under-taxation and loss of revenue which distorts competition, whilst the risk arising from double taxation is distortion of international trade. It does not provide evidence to support these statements.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

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- The presentation states that OECD Guidelines have been adopted by the OECD and G20 countries. It also states that the Guidelines were endorsed as global standard by over 100 jurisdictions and international organisations at the OECD Global Forum on VAT in November 2015.
- The presentation states that evidence shows the OECD Guidelines (particularly the 2015 BEPS Action 1 Report on taxation in the digital economy, which was included in the OECD Guidelines) are being adopted by a number of countries, and are leading to substantial increases in tax revenues. However, it does not provide any details of this evidence.

IRC initiative: <i>OECD International VAT/GST Guidelines</i>
Title: <i>Relevance of the OECD International VAT/GST Guidelines for non-OECD countries</i>
Author(s): <i>James and Ecker</i>
Date: <i>2017</i>
Type: <i>Academic Literature</i>
Source: <i>Australian Tax Forum</i>
Overview: <i>This paper considers whether OECD Guidelines are relevant for non-OECD countries, through a review of the available literature. The paper finds that they are relevant for all jurisdictions with VAT.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none">• The paper cites evidence from a 2012 OECD report that the absence of internationally coordinated approaches to taxation can result in double taxation or non-taxation.
Realised benefits of the IRC: <ul style="list-style-type: none">• The paper does not provide evidence on the realised benefits of the IRC.
Outcomes of the IRC: <ul style="list-style-type: none">• The paper cites national legislative changes to demonstrate that a number of jurisdictions have introduced reforms to implement the OECD Guidelines (e.g. Australia, New Zealand, India, Albania, Japan, Kenya and Korea). The authors state that this shows the influence of the Guidelines.

IRC initiative: *OECD International VAT/GST Guidelines*

Title: <i>Overview of Legislation in Draft</i>
Author(s): <i>HMRC and HMT</i>
Date: <i>2013</i>
Type: <i>Grey Literature</i>
Source: <i>HMRC and HMT</i>
Overview: <i>This paper presents draft legislation following the Budget 2013.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none"> • This paper does not provide evidence of mechanisms.
Realised benefits of the IRC: <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
Outcomes of the IRC: <ul style="list-style-type: none"> • The 2015 UK policy changes, resulting from the changes to services in the OECD VAT Guidelines, were quantified to add approximately £300m per annum to the UK tax base through restoring the falling tax base.

IRC initiative: <i>OECD International VAT Guidelines</i>
Title: <i>VAT: Alternative VAT treatment of Goods from Overseas</i>
Author(s): <i>HMRC and HMT</i>
Date: <i>Unknown</i>
Type: <i>Grey Literature</i>
Source: <i>HMRC and HMT</i>
Overview: <i>This paper explains who is affected by new VAT changes and provides a description of these changes.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none"> • This paper does not provide evidence of mechanisms.
Realised benefits of the IRC: <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The 2021 changes to the imports of low value goods and the liabilities of overseas suppliers to account for UK VAT, also based on the Guidelines, were estimated by the Office for Budget Responsibility (OBR) to raise over £300m per annum over the next 5 years

Case Study: IPSF

Overview

The International Platform on Sustainable Finance (IPSF) was launched in 2019, and the UK joined in 2021. IPSF members want to share information on the most environmentally sustainable finance practices, reduce barriers to these practices, and coordinate where it will help to grow the most sustainable practices.

The objective of this IRC is to: (i) “scale up the mobilisation of private capital towards environmentally sustainable finance at global level”; and (ii) “promote integrated markets for environmentally sustained finance”.¹²¹

Literature review

Search terms to identify literature on this topic were as follows:

- "ipsf" impact
- "International Platform on Sustainable Finance" impact
- "International Platform on Sustainable Finance" uk impact
- "International Platform on Sustainable Finance" benefits
- "International Platform on Sustainable Finance" investment

IRC initiative: <i>IPSF</i>
Title: <i>International Platform on Sustainable Finance Annual Report</i>
Author(s): <i>IPSF</i>
Date: <i>2020</i>
Type: <i>Grey Literature</i>
Source: <i>IPSF</i>

¹²¹ Please see: 'Factsheet: International platform on sustainable finance.' EC (2021).

Overview: *This report is the first annual report of the IPSF. It provides an overview of the work conducted over the previous year.*

Mechanisms by which the IRC could give economic benefit:

- The report states that international guidance on sustainable finance has the potential to help countries meet climate objectives, such as those from the Paris Agreement, and increase international investment.
- The report notes that IPSF's work may help coordinate actions to promote a sustainable and resilient recovery from the COVID-19 pandemic.
- The report states that taxonomies (which classify economic activities as environmentally sustainable) facilitate green investments by improving market clarity and confidence for investors, but does not provide evidence to support this. Further to this, the report argues that, if taxonomies are developed in isolation, they might lead to fragmentation and hinder the growth of sustainable finance markets. The IPSF has therefore created a working group on taxonomies which will publish a Common Ground Taxonomy. The report states that this will set out commonalities between taxonomies of IPSF members and provide investors and companies with a unique common reference point across IPSF jurisdictions. It notes that the aim of this will be to reduce transaction costs and facilitate cross-border green capital flows.
- The report states that standards and labels for green financial products reduce transaction costs for investors and increase investor confidence, but does not provide evidence to support this. It cites evidence that an increasing number of jurisdictions are developing regulations and Guidelines for these standards and labels, and explains that the IPSF are monitoring developments in this area, with the possibility of creating a dedicated working group in future to improve coordination.
- The report states that corporate environmental-related disclosure (which is the reporting of businesses of environmental-related information, such as their impact on the environment) will help investor decision-making, but does not provide evidence to support this. The report argues that greater international coordination on environmental-related disclosure would increase global transparency, reduce due-diligence costs for investors and reduce administrative costs for companies, without providing evidence to support this. The report notes that the IPSF will launch a working group on environmental-related disclosure to encourage coordination between members.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The report states that IPSF members have taken a "leading role" in markets for products that pursue sustainability objectives, especially in green bond issuance. It

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supports this by citing evidence of the high volume of issuance in China, the EU and Chile.

- The report states that sustainable finance regulations and policies have been increasing for both members of IPSF and non-members. It supports this by citing evidence of these regulations and policies.

IRC initiative: <i>IPSF</i>
Title: <i>Climate finance: an agenda for EU coordination with emerging markets</i>
Author(s): <i>Lehmann and Plant</i>
Date: <i>2020</i>
Type: <i>Article</i>
Source: <i>Bruegel</i>
Overview: <i>This article discusses coordination on sustainable finance between developed and emerging markets, through a review of the available literature. In doing so, it discusses the potential of the IPSF to achieve this and suggests areas it could focus on.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none"> • The article argues that the IPSF has the potential to improve coordination of international sustainable finance regulations, since it includes both developed countries and emerging economies. • The article argues that a high international standard for sustainable finance could reduce the risk of ‘greenwashing’, which it says could undermine all sustainable finance assets. However, it does not provide evidence to support this.
Realised benefits of the IRC: <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
Outcomes of the IRC: <ul style="list-style-type: none"> • The paper does not provide evidence on the outcomes of the IRC.

IRC initiative: <i>IPSF</i>
Title: <i>What Future for the Green Bond Market? How Can Policymakers, Companies, and Investors Unlock the Potential of the Green Bond Market?</i>
Author(s): <i>Deschryver and de Mariz</i>

Date: 2019
Type: Academic
Source: <i>Journal of Risk and Financial Management</i>
Overview: <i>This paper considers the current barriers preventing the expansion of the green bond market. In doing so, the paper conducts literature reviews, market data analysis, and interviews.</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The paper argues that creating international standards would help the green bond market develop, and supports this by citing a paper by Nguyen et al. in 2019 on green cities. • The authors argue that the IPSF “will be key” to help promote international standards.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the outcomes of the IRC.

Case Study: IOSCO

Overview

The International Organisation of Securities Commissions (IOSCO) was founded in 1983. It is an association of the world’s securities regulators. Members exchange information and help each other to address technical and operational issues. Its membership represents 95% of the world’s securities markets.

The objective of this IRC is the: “development and implementation of internationally recognised and consistent standards of regulation, oversight and enforcement”.¹²²

Literature review

Search terms to identify literature on this topic were as follows:

- IOSCO UK impacts
- IOSCO UK regulations

¹²² Please see: https://www.iosco.org/about/?subsection=about_iosco

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- IOSCO UK benefits
- IOSCO securities enforcement

IRC initiative: <i>IOSCO</i>
Title: <i>The Power and Influence of IOSCO in Formulating and Enforcing Securities Regulations</i>
Author(s): <i>Austin</i>
Date: <i>2015</i>
Type: <i>Academic</i>
Source: <i>Criminal Law Forum</i>
Overview: <i>This paper examines how IOSCO has grown in significance, its future development and progress against its goals. The author has reached their conclusions by reviewing other academic literature, and IOSCO's policy interventions and achievements.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none">• The paper details how IOSCO has increased information exchange between members, as an IOSCO entry condition is that members must agree to sharing a broad scope of information with each other. The author argues that the benefit of this is that it is difficult for countries to conceal information from each other, and easier for regulators to uncover illicit activity. The paper believes this has made it easier for countries to enforce their own laws, and prevents market breaches occurring that would harm other market participants.• IOSCO has limited entities and investors in non-signatory jurisdictions to engage in securities transactions. The expected benefit of this is to pressure non-signatory regions, such as Monaco, into joining IOSCO. If they did, it would ensure their laws also became consistent. The paper believes that coordinated legal systems make it harder for individuals to access off-shore havens and increase the exchange of information.• In developing "Objectives and Principles of Securities Regulation", IOSCO has been successful in guiding the regulations and securities laws of its members. This consistent approach allows issues to be addressed more effectively than at a national-level. The author believes this should tackle systematic risks in the trading market.
Realised benefits of the IRC: <ul style="list-style-type: none">• The paper does not provide evidence on the realised benefits of the IRC.

<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> The paper does not provide evidence on the outcomes of the IRC.
<p>IRC initiative: IOSCO</p>
<p>Title: <i>The European Union's Role in International Economic Fora: The International Organisation of Securities Commissions (IOSCO)</i></p>
<p>Author(s): <i>Directorate General For Internal Policies</i></p>
<p>Date: 2015</p>
<p>Type: <i>Academic</i></p>
<p>Source: <i>International Organisation of Securities Commissions</i></p>
<p>Overview: <i>This paper focuses on IOSCO's role in creating the G20 new financial environment, and the impact this has had on EU legislation. It details the objectives that IOSCO has and the issues these objectives seek to meet. Conclusions seem to be based on academic literature.</i></p>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> This paper focuses on three areas of IOSCO's work: (i) fostering cooperation between agencies and helping to enforce rules; (ii) creating common international standards; and (iii) helping to resolve cross-border disputes. Cooperation is important because it enables different member agencies to exchange information. This helps them to gather evidence on market abuses (e.g. insider trading) across borders. According to the paper, the benefit of this is that it gives agencies a better ability to enforce their own rules and deter breaches. IOSCO has helped to develop international standards for securities regulation, particularly since the financial crisis. However, due to the difficulty with gaining consensus amongst members, these standards are usually not very granular, reducing their effectiveness. Where IOSCO is able to act, it has the ability to act very quickly (e.g. Financial Markets Benchmarks, where the final report was published in July 2013). This has proved to be effective when no national legislation exists. This gives it a first mover advantage, where IOSCO legislation can shape what follows it. The benefit of this is that it can lead to regulatory convergence, in the paper's view.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- Examples of some of the standards that IOSCO has passed are: (i) “International Conduct of Business Principles” (1990); (ii) “Objectives and Principles of Securities Regulation” (1998); and (iii) “International Disclosure Standards for Cross-Border Offerings and Initial Listings by Foreign Issuers” (1998).

IRC initiative: *IOSCO*

Title: *Cross-border cooperation between securities regulators*

Author(s): *Silvers*

Date: *2020*

Type: *Academic*

Source: *Journal of Accounting and Economics*

Overview: *The paper analyses how IOSCO has increased cross-border enforcement capabilities of securities regulators, and how it has enhanced market security.*

Mechanisms by which the IRC could give economic benefit:

- The paper argues that IOSCO encourages cross-border cooperation by standardising the collection and sharing of information, which is necessary for enforcement. IOSCO’s cooperation protocols improve regulator access to information held by other agencies, and the tests that members are required to pass to enter IOSCO ensure they have the necessary legal system to enforce measures. This improved cooperation has made it easier to understand the activity that is occurring in securities markets. The consequence of this is that it has become harder to use securities for criminal activity, such as to launder money or hide terrorism-related finance.
- The paper argues IOSCO also enables stronger regulators to help weaker regulators with enforcement. By facing the threat of actions from stronger regulators, no matter which market they operate in, cooperation can force managers to be more transparent and constrain their opportunism. Under IOSCO, where illegal actions that could harm investors occur, assets can be frozen and other enforcement measures taken more quickly and more effectively. This credible threat of enforcement across markets should force managers to be more transparent and constrain their opportunism. The benefit of this is that it should reduce investors’ risk exposure and prevent them being harmed by abusive practices.
- The paper states that another benefit IOSCO delivers is a measurable reduction in transaction costs. Although these reductions vary between countries, they are

<p>achieved by IOSCO delivering greater alignment in law, and economic convergence (e.g. reciprocity), which deliver economies of scale.</p> <ul style="list-style-type: none">• Finally, IOSCO has managed to improve equity market liquidity. The authors believe this is because, without cooperation, host markets are prone to information and regulatory issues, and so are unable to adequately protect their markets.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none">• Home markets experience liquidity improvements of 6%-9%, whilst host markets experience improvements of 25%-35%.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none">• The paper does not provide evidence on the outcomes of the IRC.

Case Study: CAC and INFOSAN

Overview

The Food Standards Agency (FSA) is an active member of the Codex Alimentarius Commission (CAC). The CAC, which was established by the Food and Agriculture Organisation of the United Nations and World Health Organisation (WHO) in 1963, develops internationally agreed food standards, guidelines and codes of practice. Codex has 199 members and helps its members to meet the challenges they face in a transparent manner. The agreement is far reaching enough that WTO members who want to set higher standards than Codex must produce scientific evidence to justify their decision.

Its objective is to ensure that: “consumers can trust the safety and quality of the food products they buy and importers can trust that the food they ordered will be in accordance with their specifications”.¹²³

The International Food Safety Authorities Network (INFOSAN) is a global network of national food safety authorities. It helps members manage food safety risks – for example, by rapidly sharing information during food safety emergencies to stop the spread of contaminated food between countries.

The objective of this IRC is to: “strengthen prevention, preparedness and response to food safety incidents and emergencies through fostering a global community of practice among food safety professionals”.¹²⁴

Literature review

Search terms to identify literature on this topic were as follows:

¹²³ Please see: <http://www.fao.org/fao-who-codexalimentarius/about-codex/en/>

¹²⁴ Please see: <http://www.fao.org/food-safety/food-control-systems/empres-food-safety/infosan/en/>

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- fsa cooperation with who on food standards
- International Food Safety Authorities Network benefits
- INFOSAN UK benefits
- Codex Alimentarius Commission
- Codex Alimentarius Commission regulatory impacts
- Codex Alimentarius Commission UK benefits
- Codex Alimentarius Commission publications

IRC initiative: <i>CAC and INFOSAN</i>
Title: <i>Balancing Risk Reduction and Benefits from Trade in Setting Standards</i>
Author(s): <i>Wilson and Otsuki</i>
Date: <i>2003</i>
Type: <i>Academic</i>
Source: <i>International Food Policy Research Institute</i>
Overview: <i>This paper analyses the impact that higher food standards can have on international trade. To reach its conclusions, it analyses case study and anecdotal evidence.</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The paper analyses the different levels of trade and health outcomes between: (i) EU standards pre- and post-2003 and (ii) Codex's international standards. The author argues that countries who set their standards higher than Codex's international standards can severely reduce the level of international food exports. In particular, it has a negative impact on developing countries that are trying to sell food products to developed markets, as the higher standards act as technical barriers to trade.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper finds that if all countries adopted Codex agreed standards for aflatoxin levels then the value of cereal and nut trade would have increased by \$6.1 billion, or 51%, in 1998. • In addition, of six importing and 16 exporting countries, if the six importing nations adopted the Codex agreed tetracycline standard, the value of beef trade would increase by \$8.8 billion, which is \$3.2 billion higher than under the pre-EU harmonised level.

Outcomes of the IRC:

- The paper does not provide evidence on the outcomes of the IRC.

IRC initiative: *CAC and INFOSAN*

Title: *Trade and Food Standards*

Author(s): *Food and Agriculture Organisation of the United Nations and World Trade Organisations*

Date: *2017*

Type: *Regulatory article*

Source: *Codex Alimentarius International Food Standards*

Overview: *This paper explains the reasons why food standards are set, why countries engage with international bodies, and why coordination is essential. The paper is based on the FAO's, WTO's and relevant bodies' experience of setting international standards. Its data is based on WTO trade statistics.*

Mechanisms by which the IRC could give economic benefit:

- Codex facilitates trade by ensuring all food products meet the same standards. This means producers do not need to know their final market in advance of growing the products, as the produce will be more widely accepted. This reduces unnecessary trade restrictions.
- As there are not different restrictions for different markets, goods can be produced more efficiently. If only one standard is required, only one quality control process is needed, instead of multiple. This allows producers to benefit from greater economies of scale.
- All goods are required to pass the same quality control checks. Not only does this ensure that they are safe, as they have met the necessary scientific tests, but it also saves each country having to duplicate their own checks. By avoiding unnecessary checks, this should reduce the cost of the goods.
- Codex provides internationally recognised guidance on how to produce food, and the hygiene controls that are required at each stage of the process. This should reduce the likelihood that unsafe food is produced, creating health benefits (e.g. fewer deaths from unsafe food, reduced disease transmission).
- As an international body that collects information from a range of countries, Codex can increase the speed of response as new technologies and science emerges. With its greater access to information, the author believes that Codex can assess

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the risks faster and ensure international regulation remains aligned across countries. Not only will this guarantee food standards remain high, but it will also allow emerging technologies to be accepted more quickly, meaning food production can become more efficient. This will allow food production to keep pace with the world's growing population.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The paper notes that food exports have increased from \$22.99 billion in 1963 when Codex was formed to \$1118.52 billion in 2013.

IRC initiative: *CAC and INFOSAN*

Title: *Negotiating International Food Standards: The World Trade Organisation's Impact on the Codex Alimentarius Commission*

Author(s): *Veggeland and Ole Borgen*

Date: *2005*

Type: *Academic*

Source: *An International Journal of Policy, Administration, and Institutions*

Overview: *This paper provides empirical analysis of how the role, position and perception of Codex has changed after it was referred to by the WTO. It examines how this has changed the way that member states implement standards, and their divergence from Codex standards. It assesses the impact this has on world trade.*

Mechanisms by which the IRC could give economic benefit:

- The author believes that engagement with Codex is important for countries who wish to secure market access for their agricultural products. It has been successful in getting members to link their work on food safety to trade policy.
- Codex has been successful in forcing members to adjust their regulations where they cannot be justified, where higher food standards have been introduced that do not have strong scientific basis. Codex assesses standards based on a system of risk analysis, meaning standards must be scientifically based, appropriate and proportionate. This is effective in preventing countries from establishing unjustifiably high restrictions that act as barriers to trade, thus increasing trade flows and reducing the cost of food products.

Realised benefits of the IRC:

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- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- In 2003, Peru used the WTO dispute settlement system in 2003 to challenge the higher EU regulatory sardine standards. Having lost, the EU was forced to change its regulations on the trade description for sardines to be in line with Codex standards.

IRC initiative: *CAC and INFOSAN*

Title: *Looking Inside the International Food Safety Authorities Network Community Website*

Author(s): *Savelli and Mateus*

Date: *2020*

Type: *Academic*

Source: *Journal of Food Protection*

Overview: *This paper examines the experience that INSOFAN members have had with engaging with the agency. It tests whether INSOFAN membership has improved global food safety and prevented foodborne illness. As evidence, the study analyses INSOFAN activity, survey evidence and other academic literature.*

Mechanisms by which the IRC could give economic benefit:

- The author states that INFOSAN's activities include reducing contaminated food, preventing foodborne disease outbreaks and strengthening food safety. It does this by increasing rapid information exchange during crises, and promoting collaboration. These activities allow members to respond quicker when crises do occur, enabling them to limit the number of cases and reduce the cost of the outbreak.
- The agency also delivers training events and runs simulation exercises. This helps to strengthen national-level food safety capacity. This allows countries to share best practice. The author believes this delivers rapid implementation which should avoid the cost of disruption to the food supply.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The paper does not provide evidence on the outcomes of the IRC.

Case Study: International Convention on Nuclear Safety

Overview

The International Convention on Nuclear Safety is an international treaty that covers countries operating land-based civil nuclear power plants. It was signed in 1994 and now has 78 signatories. Its aim is to ensure a high-level of worldwide nuclear safety through international cooperation. This involves safety related cooperation, common standards, and agreements to allow international peer reviews on regular three-year cycles.

Its objective is: “to commit Contracting Parties operating land-based civil nuclear power plants to maintain a high-level of safety by establishing fundamental safety principles to which states would subscribe.”¹²⁵

Literature review

Search terms to identify literature on this topic were as follows:

- International Convention on Nuclear Safety UK benefits
- IAEA impact on UK
- IAEA nuclear safety benefits
- International Convention on Nuclear Safety
- International Convention on Nuclear Safety impacts

IRC initiative: <i>International Convention on Nuclear Safety</i>
Title: <i>Convention on Nuclear Safety Is Viewed by Most Member Countries as Strengthening Safety Worldwide</i>
Author(s): GAO
Date: 2010
Type: <i>Regulatory article</i>
Source: GAO
Overview: <i>This paper assesses the benefits and limitations of the Convention, and how successfully it has been implemented. It surveys 64 of the parties at the Convention and analyses their responses, along with other relevant material and interview evidence.</i>
Mechanisms by which the IRC could give economic benefit:

¹²⁵ Please see: <https://www.iaea.org/topics/nuclear-safety-conventions/convention-nuclear-safety>

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- The Convention has facilitated joint research that exchanges technical information (e.g. reactor design or fire safety) and helps to improve best practice. This should improve plant safety across multiple jurisdictions. It has also normalised communication between parties, making them more comfortable to engage in dialogue when they have issues. This has improved safety and reduced the chance of a disaster that would inflict major economic cost.
- Parties believe that the regulatory framework that the Convention requires signatories to follow increases the effectiveness of regulatory frameworks (by requiring strong, effective and independent regulatory bodies), and transparency (through the requirement to publish a report every three years and peer review process). The author believes that this has increased the independence of many regulators and given them greater enforcement powers. The Convention has also improved sharing of best practice by comparing one country's experience with that of others. The report also forces signatories to consider routine safety procedures, as these are scrutinised.
- Key to the success of the programme is confidentiality. Some countries who were interviewed stated that the confidentiality assurance meant their reports were more comprehensive. This means that, since the Convention has been signed, its participation has significantly grown. If more countries are subjecting themselves to international scrutiny, safety standards should rise, decreasing the likelihood of nuclear disasters.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- In 2008, the required national reports successfully encouraged the United States to discuss with other governments and regulators the costs and benefits of stricter standards protecting nuclear workers and the public from radiation exposure.

IRC initiative: *International Convention on Nuclear Safety*

Title: *By accident or by design? Pushing global governance of nuclear safety*

Author(s): *Taebi and Mayer*

Date: *2017*

Type: *Academic*

Source: *Progress in Nuclear Energy*

Overview: *This paper analyses how the nuclear landscape is changing, the existing governance regime for nuclear safety and security, and what the impact of changing the regime would be on enforcement. The paper is based on literature reviews and case study evidence.*

Mechanisms by which the IRC could give economic benefit:

- This paper states that the International Convention of Nuclear Safety explicitly gets signatories to sign up to legislation that the safe operation of nuclear plants is the primary responsibility of member states. Having agreed to this, rather than being required to build a monitoring and compliance system, members regularly meet and review each other's performance against their obligations. The benefit of this system is that it is cheaper to operate than having to monitor each country, particularly as the number of countries that operate civil nuclear power increases.
- So as not to misrepresent this paper, it is important to note the authors do not believe this framework is sufficient. They believe peer reviews should be more comprehensive and transparent, and it should be possible to take enforcement actions against countries. They believe the current system, and the fact that China and Russia are selling nuclear power stations to developing countries, could lead to a "race to the bottom" and risk nuclear disaster.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The paper does not provide evidence on the outcomes of the IRC.

Case Study: Standard ISO 45001

Overview

Introduced in March 2018, ISO 45001 sets international requirements for occupational health and safety management systems. The committee is made up of 20 bodies and experts from over 50 countries, including the UK's Health and Safety Executive (HSE). It facilitates the information and ideas exchange between countries to set bilateral standards where they are deemed necessary.

The objective is: "to enable organisations to provide safe and healthy workplaces by preventing work-related injury and ill health".¹²⁶

¹²⁶ Please see: <https://www.iso.org/standard/63787.html>

Literature review

Search terms to identify literature on this topic were as follows:

- ISO 45001
- ISO 45001 UK impact
- ISO 45001 UK benefits
- ISO 45001 regulatory enforcement
- HSE international standard setting
- ISO 45001 UK implementation

IRC initiative: <i>Standard ISO 45001</i>
Title: <i>ISO 45001 and the evolution of occupational health and safety management systems</i>
Author(s): <i>Jones</i>
Date: <i>2017</i>
Type: <i>Academic</i>
Source: <i>IOSH paper</i>
Overview: <i>The paper analyses the implications of the new ISO 45001 standards on organisations. It assesses the similarities and differences between ISO 45001 and previous standards, and the impact that the new standards will have on worldwide health and safety. It achieves this by reviewing the analysis of past literature on the benefits and limitations of previous schemes.</i>
Mechanisms by which the IRC could give economic benefit: <ul style="list-style-type: none">• The author believes that ISO 45001 will give occupational health and safety management systems strategic attention, leadership and resources worldwide. It will ensure organisations comply with certain standards worldwide across their supply chains. The author believes ISO 45001 will ensure that organisations place greater importance on standard assurance which will be important in addressing both familiar issues and those that will be associated with new technologies. This should ensure consistently higher regulatory standards around the world.• ISO 45001 should also encourage a long-term view and greater engagement from CEOs and Boards because of the increased reputational importance of health and safety standards. The IOSH believes that achieving engagement with both key leadership and works is key to achieving effective outcomes. This is important because long-term strategic input is required to prevent employees being exposed

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to health hazards that can lead to long-latency conditions. It will encourage Boards to link health and safety standards to reputation (and profitability).

- The scheme could also support increased alignment between various standards (e.g. ISO 9001, ISO 14001 and ISO 45001). In the future, this could lead to integrated performance reporting on economic, social, environmental and governance issues.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The ILO estimate that each year 2.78 million people are killed by work-related accidents and diseases, and that there are an additional 374 million non-fatal accidents. The cost of these accidents is estimated to be 4% of the world's GDP per annum. Reducing the number of accidents could therefore increase GDP.

IRC initiative: *Standard ISO 45001*

Title: *Our World with ISO 45001*

Author(s): *Gasiorowski-Denis*

Date: *2018*

Type: *Academic*

Source: *ISO paper*

Overview: *The paper analyses the mechanisms that ISO 45001 invokes to prevent workplace accidents. As the first international standard for occupational health and safety, it is able to provide greater protection to workers than previous schemes through global coordination. The paper provides quantitative evidence from the UN and ILO of the current damage that workplace accidents cause. However, the author does not seem to have evidence to support the benefits mechanisms that have been described.*

Mechanisms by which the IRC could give economic benefit:

- The author argues that the ISO 45001 framework simplifies health and safety compliance for companies with multinational supply chains. It is an internationally agreed set of standards, which has received input from government agencies, and industry stakeholders. It provides a standard, easy-to-use framework that can be applied to factories and other facilities around the world. Only having to abide by one set of standards, as opposed to multiple, reduces the cost of compliance.

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- ISO 45001 recognises the importance of worker consultation in the development, planning, implementation and improvement of standards. By requiring both employees and senior management to actively participate in the process, it increases their visibility of the standards and makes all members of the organisation responsible for maintaining high standards.
- The author argues that by reducing accidents that occur in the workplace, it prevents companies from losing highly skilled employees. When an employee is injured in the workplace, the company loses the skills and knowledge that they have invested time and money in developing. Preventing accidents occurring means the employees will stay working for the company for longer, providing them with greater value.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The paper does not provide evidence on the outcomes of the IRC.

IRC initiative: *Standard ISO 45001*

Title: *A new ISO standard for occupational health and safety management systems: is this the right approach?*

Author(s): *Robertson*

Date: *2016*

Type: *Policy review*

Source: *European Economic, Employment and Social Policy*

Overview: *This paper assesses the benefits and problems that ISO 45001 creates, compared to the existing European health and safety standards.*

Mechanisms by which the IRC could give economic benefit:

- The framework of ISO 45001 directs that employers take measures to protect the health and safety of their workers where possible, and where it is not, they must control and evaluate the risk. It uses a high-level approach because it theorises that this makes it easier for businesses to integrate its guidance into the business processes at a lower cost.
- The paper states that compliance with ISO 45001 could become a condition of many contracts (particularly in the US). This would prevent companies that do not meet sufficiently high health and safety standards from winning new business.

<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper cites the “Opinion of the Advisory Committee on Safety and Health at Work to the European Commission” from September 2015, which argues that ISO 45001 has been effective at reducing the levels of injury across Europe.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the outcomes of the IRC.

<p>IRC initiative: <i>Standard ISO 45001</i></p>
<p>Title: <i>Understanding the impact of business to business health and safety ‘rules’</i></p>
<p>Author(s): <i>HSE</i></p>
<p>Date: <i>2019</i></p>
<p>Type: <i>Policy review</i></p>
<p>Source: <i>HSE</i></p>
<p>Overview: <i>This paper assesses the benefits and problems that ISO 45001 creates, compared to the existing European health and safety standards.</i></p>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • Minimum standards such as ISO 45001 can held contracting bodies seek assurance from their supply chain, with tender requirements. As these only set minimum compliance criteria, they can also provide a way for “best in class” status amongst businesses that want to exceed these requirements. • As standards such as ISO 45001 are globally recognised, it also has the potential to boost trade.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper highlights that, if businesses want certification from ISO 45001, they will need to go “beyond what health and safety law requires”, which can lead to additional direct and indirect costs. These include the costs of auditing and certification and the purchase of the standard and associated training. The paper also says that the HSE considers that a formalised management system approach (e.g. ISO 45001) may not be the best model for all businesses, especially small and/or low risk ones.

Outcomes of the IRC:

- The paper does not provide evidence on the outcomes of the IRC.

Case Study: Access Consortium

Overview

Access Consortium's aim is to promote regulatory alignment between its members. The heads of each of its five agencies meet twice a year to discuss the progress that working groups have made and set the agenda for the forthcoming year. As globalisation increases the number of multinational therapeutic products, and new technologies result in the rapid emergence of products, it is important for cooperation to share the most up-to-date technical expertise and ensure a consistent regulatory approach. This will enable consumers to gain the quickest access to new therapeutic products.

Its objective is: "to maximise international cooperation between partners in the consortium, reduce duplication, and increase each agency's capacity to ensure patients have timely access to high quality, safe and effective therapeutic products".¹²⁷

Literature review

Search terms to identify literature on this topic were as follows:

- Access consortium MHRA cooperation
- MHRA international regulatory cooperation
- Access consortium

IRC initiative: <i>Access Consortium</i>
Title: <i>Breaking up the band: European regulatory cooperation in a post-Brexit world</i>
Author(s): <i>Acha</i>
Date: <i>2017</i>
Type: <i>Academic</i>
Source: <i>British Journal of Pharmacy</i>

¹²⁷ Please see: <https://www.gov.uk/guidance/access-consortium>

<p>Overview: <i>This paper analyses the benefits to the European Pharmaceutical Industry from regulatory cooperation. It assesses how Europe gained from this and examines how Brexit might cause future disruption and challenges to the industry as this cooperation is reduced.</i></p>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The authors believe that cooperation delivers a free flow of research, manufacturing and supply of products. It does this because all countries operate under a harmonised regime which is streamlined and simple to follow. This makes innovation easier as companies have less barriers to bring products to market. This should benefit patients as they will be able to access a greater number of products more quickly. • As new medical technologies are developed, these require regulatory assessment to change. Coordinating a regulatory approach across countries, reducing cost for governments and companies. It avoids tests being duplicated and means companies product's only need to pass one test, instead of multiple slightly different ones. Regulators can also share best practice information with each other.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the outcomes of the IRC.

<p>IRC initiative: <i>Access Consortium</i></p>
<p>Title: <i>Access Consortium Strategic Plan 2021-2024</i></p>
<p>Author(s): <i>Access Consortium</i></p>
<p>Date: <i>2021</i></p>
<p>Type: <i>Regulatory article</i></p>
<p>Source: <i>Access Consortium</i></p>
<p>Overview: <i>This paper details the organisation's strategic goals over the time period and the measures it will examine to determine if it has been successful.</i></p>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The consortium aims to align regulatory approaches to therapeutic goods. This will benefit producers as it will avoid them having duplicate tests across multiple jurisdictions (reducing their cost) and allow them to roll-out high quality, safe and

effective health products across different jurisdictions more quickly without having to pass multiple tests for each authority.

- The paper argues that cooperation will enable the regulators to work-share the applications for registrations of medicines containing new substances or manufacturing techniques. In addition, they can share resources and expertise to help them keep up with market innovation, to reduce the time it takes products to receive regulatory approval and get to market. The countries will also share lessons learnt and best practice with each other, to enable them to learn from past mistakes. This will be particularly important as they try to take learnings from COVID-19. This can improve regulatory intervention in the future.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The paper does not provide evidence on the outcomes of the IRC.

Case Study: IAF

Overview

The International Accreditation Forum (IAF), which was founded in 1993, is a worldwide association of accreditation bodies. It has 87 accreditation bodies. To gain acceptance, each accreditation body must undergo stringent evaluations to ensure that it complies with IAF standards. However, once accepted, an accreditation assessment awarded by one member will be accepted in all member countries.

The objective of this IRC is to: “ensure mutual recognition of accredited certification and validation/verification statements between signatories to the MLA”.¹²⁸

Literature review

Search terms to identify literature on this topic were as follows:

- International Accreditation Forum
- International Accreditation Forum benefits
- International Accreditation Forum impacts
- International Accreditation Forum UK regulations
- IAF MLA impact on UK

¹²⁸ Please see: <https://iaf.nu/en/about-iaf-mla/>

IRC initiative: <i>IAF</i>
Title: <i>The effects of cooperation in accreditation on international trade: Empirical evidence on ISO 9000 certifications</i>
Author(s): <i>Blind, Mangelsdorf and Pohlisch</i>
Date: <i>2018</i>
Type: <i>Academic</i>
Source: <i>International Journal of Production Economics</i>
Overview: <i>This paper analyses the benefits countries gain by holding membership of IAF. The paper conducts a gravity model on United Nation Statistical Division's COMTRADE Database between 1999 and 2012, and reviews the relevant literature to draw its conclusions. It examines how accreditation can impact international trade and confidence in product quality for both developed and developing countries.</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The paper argues that the purpose of accreditation is to provide consumers and other companies with a reliable quality indicator. The paper finds that countries import less when they are unsure of the quality. When they receive credible quality assurances, trade flows rise. • IAF provides the additional benefit that, once a country is admitted, not only does it demonstrate that it insists on high quality products, but it is required to accept accreditation certificates from other IAF member countries. This prevents members having to reassess each other's product quality, reducing the economic cost of duplicated certification. The paper finds that there was a high cost for each country having to confirm quality. This cost often acted as a barrier to trade, and where it did not, it raised the cost of the product.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper finds that members of IAF enjoy increased levels of trade compared to those who have not joined, based on the results of their regression analysis.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • IAF promotes the market access of domestic companies as it verifies that product accreditation in one country is equivalent to that of another member.
IRC initiative: <i>IAF</i>

<p>Title: <i>The International System of Quality Infrastructures – national approach and international collaboration</i></p>
<p>Author(s): <i>Denkler</i></p>
<p>Date: <i>2014</i></p>
<p>Type: <i>Conference Paper</i></p>
<p>Source: <i>BAM Federal Institute for Materials Research and Testing</i></p>
<p>Overview: <i>This paper explains the purpose of international coordination of quality accreditation and the benefits that it can provide. It is unclear what the author bases their conclusions on, but our assumption is that they have conducted a review of the relevant literature.</i></p>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The paper explains that before the IAF, there were information asymmetries in markets. Purchasers did not know what the quality of products imported from different markets would be. The author argues the IAF addresses this with its single accreditation program. The first benefit of this is that it gives countries confidence that dangerous products will be removed from the market. The paper finds this provides health, safety and environment protections for consumers by preventing them from being harmed by dangerous products. • The paper explains IAF’s principle of “tested/inspected/certified once – accepted everywhere”. The purpose of this is to provide assurances that products meet certain requirements that are consistent across members. Knowing all members conform to certain defined requirements reduces technical barriers to trade, as goods in one IAF member’s country will conform with all members’ standards. Once one member has accredited a product, other members do not need to duplicate the test. The paper finds this reduces the cost of trade. Therefore, this process should increase members’ access to the international markets and increase trade flows.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the outcomes of the IRC.
<p>IRC initiative: <i>IAF</i></p>
<p>Title: <i>Accreditation: Adding Value to Supply Chains</i></p>

Author(s): IAF
Date: 2020
Type: Promotional Documents
Source: IAF
Overview: <i>This paper explains the issues that accreditation addresses and the benefits that IAF delivers by ensuring consistent quality assurances around the world. The document appears to have used IAF, ILAC and OECD material as the basis for its conclusions, in addition to specific case study data.</i>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • The paper explains that accreditation is necessary to help businesses understand the quality of materials they source from around the world. If each country followed its own regulations, it would be impossible to consistently understand the quality. The paper finds that accreditation gives businesses a method to be confident that products are up to standard. • The paper believes the IRC reduces the cost of doing business as each company doesn't have to check all materials themselves. It believes this also encourages businesses to set up more global supply chains as they can be confident of consistent standards. • It would be cost-prohibitive for governments and regulators to test all products entering their markets. By cooperating, it is possible to have common standards that all members comply with. This paper argues that this gives consumers confidence that products are safe, and reduces technical barriers to trade that would otherwise increase costs.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • £6.1 billion of additional UK exports per year can be attributed to standards and accreditation conformity. • UK local councils use accredited surveyors to conduct asbestos surveys. This reduces council costs as they do not need to conduct tests themselves.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the outcomes of the IRC.

Case Study: DMAS

Overview

In September 2019, the Department for International Trade (DIT) launched its Digital Market Access Service (DMAS) – a tool that allowed British businesses to report issues that were inhibiting their ability to trade internationally. DIT explain: “Barriers include unnecessary, legal, regulatory or administrative requirements. This includes labelling restrictions, out-of-date regulations and licensing requirements.”¹²⁹ The tool is an online form, which any UK-based business is able to fill in to report issues.

The purpose of the IRC is to: “ensure British businesses can flag these issues and the government’s trade experts can work with countries around the world to resolve them.”¹³⁰

Literature review

Search terms to identify literature on this topic were as follows:

- DIT access tool
- DIT market access
- DIT market access success
- DIT market access barrier removed
- Department for International Trade access tool
- Department for International Trade market access
- Department for International Trade market access success
- Department for International Trade market access barrier removed

IRC initiative: <i>DMAS</i>
Title: <i>New service to open overseas markets for UK businesses</i>
Author(s): <i>DIT</i>
Date: <i>2019</i>
Type: <i>Policy paper</i>
Source: <i>DIT</i>

¹²⁹ Please see: <https://www.gov.uk/government/news/new-service-to-open-overseas-markets-for-uk-businesses>

¹³⁰ Please see: <https://www.gov.uk/government/news/new-service-to-open-overseas-markets-for-uk-businesses>

<p>Overview: <i>This paper introduces the IRC and how this might lead to benefits for British business in the future. It also states how the DIT would help to alleviate trade barriers faced by British businesses.</i></p>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • This paper says that any issue that was reported by a British business would be evaluated and assessed by the DIT, with its experts then working with other governments to resolve the issues. Without removing market access barriers, British exports would be less competitive than locally produced goods and services (with imports from Britain sometimes even banned). The IRC helps to ensure that British exports can be competitive with local products.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the realised benefits of the IRC.
<p>Outcomes of the IRC:</p> <ul style="list-style-type: none"> • The paper does not provide evidence on the outcomes of the IRC.

<p>IRC initiative: <i>DMAS</i></p>
<p>Title: <i>Trade barriers removed to boost business</i></p>
<p>Author(s): <i>DIT</i></p>
<p>Date: <i>2020</i></p>
<p>Type: <i>Strategic review/case studies</i></p>
<p>Source: <i>DIT</i></p>
<p>Overview: <i>This paper provides an overview of some of the benefits and outcomes that were achieved by the UK government as a result of the market access tool in 2019/20.</i></p>
<p>Mechanisms by which the IRC could give economic benefit:</p> <ul style="list-style-type: none"> • This paper does not provide evidence on the mechanisms by which the IRC could give economic benefit.
<p>Realised benefits of the IRC:</p> <ul style="list-style-type: none"> • The paper indicates that analysis by the government showed that British exports being boosted by £75bn per year as a result of market access barriers being liberalised.

Impacts of International Regulatory Cooperation (IRC) initiatives

- There were several examples of market access barriers that were lifted, which are covered in “Outcomes of the IRC”, but the two main sets of benefits were: (i) an estimated £127 million from removing the ban on exports of beef and lamb to Japan; and (ii) a sports nutrition company, Grenade, being able to boost online sales by 294% as a result of strict labelling rules on products sold to the UAE being removed.

Outcomes of the IRC:

- The paper says that there were 175 trade barriers removed across 61 countries worldwide by the DIT during 2019/20, with British businesses therefore able to export more easily and invest in global markets.
- The paper gave examples of the barriers removed: (i) the lifting of beef and lamb exports to Japan; (ii) making it easier for British fisherman to export to Brazil; and (iii) removing strict labelling rules on products sold to the UAE.

IRC initiative: DMAS

Title: *Annual Report and Accounts 2020-21 (for the year ended 31 March 2021)*

Author(s): *DIT*

Date: *2021*

Type: *Strategic review*

Source: *DIT*

Overview: *This paper is the DIT’s annual report for 2020/21, and includes some details on the outcomes of market access activities by the DIT in that year.*

Mechanisms by which the IRC could give economic benefit:

- This paper does not provide evidence on the mechanisms by which the IRC could give economic benefit.

Realised benefits of the IRC:

- The paper does not provide evidence on the realised benefits of the IRC.

Outcomes of the IRC:

- The paper says that there were 787 Market Access Barriers reported on the service during the 2020-21 year, which was down 28.4% from the previous year. Out of these 787 Barriers, 246 were resolved, with 188 resolved in full and 58 in part.

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