



Ministry
of Defence

**JSP 315: BUILDING PERFORMANCE STANDARDS
(BPS)
Part 1: Directive**

Foreword

Infrastructure is a key enabler of Defence capability, the vision for which remains: Infrastructure that is optimised, affordable and supports our Defence capabilities, outputs and communities both now and in the future.

The Defence Estate is large, diverse and widely dispersed across the UK and overseas. In the UK, it covers around 220,000 hectares comprising military training areas, naval bases, barracks, airfields, supply depots, and offices, but in a way which owes more to history than to its efficient use. The 2010 Strategic Defence & Security Review (SDSR) radically changed the number and shape of the Armed Forces and MOD civilian staff, which has in turn driven corresponding changes to their infrastructure needs. This transformation has continued with SDSR 2015, which confirmed the need for estate transformation through development of the MOD footprint strategy.

Defence Infrastructure Policy and Performance Standards are influenced by wider Government policy, specific defence requirements and national standards. Defence has some unique infrastructure requirements, but only some. The vast majority of what we need is common to other sectors, and this needs to be reflected in how we set our infrastructure requirements. JSP 315 has been updated to reflect this approach, to drive an appropriate cost base, process and efficient standards in defence. JSP 315 sets evidenced-based requirements and standards to support military capability that are baselined and proven against Industry and Other Government Departments (OGD) comparators. This JSP 315 enables an improved, faster and more cost-effective development and delivery and operation of infrastructure.

This JSP and supporting guidance set a series of reference designs for specific defence infrastructure and benchmark capital and operational costs for the planning and delivery of MOD infrastructure. It is designed to be used by MOD staff and Industry Partners responsible for the planning, costing, and delivery of the infrastructure assets and projects funded by MOD.

Defence Authority for Capability Coherence

Lieutenant General Mark Poffley Deputy Chief of Defence Staff

(Military Capability)

Preface

How to use this JSP

1. JSP 315 sets the agreed technical, functional and spatial requirements along with the benchmark capital and operational costs for the planning and delivery of new and refurbished MOD infrastructure. It is designed to be used by staff responsible for the planning, costing, and delivery of the infrastructure assets and projects funded by MOD.
2. This JSP contains the policy, direction and guidance on the processes involved and best practice in setting specific infrastructure requirements. The content of this JSP will be kept under review to ensure it reflects changes in defence requirements in line with other sectors.
3. The Building Performance Standards (BPS) contained within this JSP set a reference point for defence requirements. Each new requirement must be clearly defined and tested against the applicable core standard.
4. JSP 315 is divided into the parts shown below;
 - Part 1 - Policy, Governance and application of the BPS.
 - Part 2 - BPS
 - o **Estate Wide Common Standards and Guidance.** Cover MOD requirements applicable across the estate and to be referenced in conjunction with specific BPS.
 - o **Specific Building Performance Standards.** Primarily covering the functional and space standards, costs estimates and any guidance specific to the standard.
 - BPS are supported by a Design Library
 - Part 1 of the library contains the reference exemplar plan drawings, Schedule of Areas and Auto Selector guidance and details of generic areas/rooms, Room Data Sheets (RDS) that detail the components, fixtures, fittings, finishing's and environmental requirements that will meet the standards.
 - Part 2 of the library is for use by DIO and its Professional Support Providers.

General Approach

5. The new BPS have been designed to take a broad approach to capital investment that moves beyond the immediate expenditure. Performance and the application of the BPS shall be considered in a way that requires the Capability Owner, Delivery Organisation and Industry Partners to;

- a. Use BPS as evidence in support of investment decisions and demonstration of compliance with the performance specification;
- b. Have an output focus that balances both capital and operational performance;
- c. Enable benchmarking against other relevant industry and government standards;
- d. Enable project teams to identify and challenge, at an early stage, proposed and potential divergences from these standards.

Coherence with other Defence Authority Policy and Guidance

6. Where applicable, this document contains links to other relevant JSPs, some of which may be published by different Defence Authorities. Where particular dependencies exist, these other Defence Authorities have been consulted in the formulation of the policy and guidance detailed in this publication.

Related JSPs	Title
DSA 01.1	Defence Policy for Health and Safety and Environmental Protection
JSP 418	Management of Environmental Protection in Defence
JSP 426	Fire Safety Manual
JSP 440	Defence Manual of Security
JSP 462	Financial Management Policy Manual
JSP 464	Tri-Service Accommodation Regulations (TSARs)
JSP 850	Infrastructure and Estate Policy

Training

7. Organisations shall ensure that staff receive sufficient training and education to be able to effectively deliver the requirements of this JSP.

Further Advice and Feedback - Contacts

8. The owner of this JSP is DCDS (MilCap), the Defence Authority for Capability Coherence. For further information on any aspect of this JSP, or questions not answered within the subsequent sections, or to provide feedback on the content, contact as below.

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GLOSSARY

9. Abbreviations

ACDS (C&FD)	Assistant Chief of Defence Staff – Capability & Force Design
BPS	Building Performance Standards
BIM	Building Information Modelling
BRCS	MOD’S Building Regulations Compliance System
CTM	Counter Terrorism Measures
DCDS (MilCap)	Deputy Chief of Defence Staff (Military Capability)
DEO	DIO’s Defence Estate Optimisation
DG Fin	Deputy Chief of Defence Staff (Director General Finance)
DFRMO	Defence Fire Risk Management Organisation
DFSR	Defence Fire Safety Regulator
DG HOCS	Director General Head Office and Commissioning Services
DIO	Defence Infrastructure Organisation
FLC	Front Line Command
FMC Infra Cap	Finance and Military Capability – Infrastructure Capability
GSL	Government Soft Landings
IPG	Integrated Project Guide
IJC	Infrastructure Joint Committee
JSP	Joint Services Publication
JWP	Joint Working Party
MOD	Ministry of Defence
PPD	DIO’s Programme and Projects Delivery
SD	DIO’s Service Delivery
SDSR	Strategic Defence & Security Review
SEE	DIO’s Safety, Environment and Engineering
SME	Subject Matter Expert
SRO	Senior Responsible Officer
TLBs	Top Level Budget Holders

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Section 1 - Introduction and Application of the BPS

Introduction

1. The BPS set the MOD standards for infrastructure provision for specified activities and functions. They apply to the provision of new structures and to the refurbishment, modernisation or conversion of existing permanent and temporary facilities.
2. The BPS are not an automatic entitlement, however, variations to the provisions in the BPS shall only be made where there is demonstrable and endorsed capability requirement, value for money case and / or operational benefit.
3. The standards have been built up in layers to allow benchmarking with industry and other government departments. The standards in the BPS include an Industry Standard Core Layer that compares well to modern industry and best practice plus appropriate allowances to incorporate a Defence Layer policy such as CTM, security and fire. Any departure / divergence from the BPS needs to be identified in a Customer Layer' and agreed by the Budget Holder and relevant Technical Authority. Divergence has to be compared with defined requirements and benchmarks, which have to be justified, together with any variations from the BPS, in accordance with the policies and procedures prescribed in JSPs 462 (Financial Management Policy Manual) and JSP 850 (Infrastructure and Estate Policy). The delivery organisation shall inform the DIO Construction Standards Manager of any agreed material changes against the BPS and the outcome of these on the project.
4. The BPS do not cater for all types of facilities required by the Armed Forces and the MOD, i.e., those that do not directly enable military capability or have other governmental standards such as health, education, policing etc. In such cases the most appropriate nationally recognised standards prescribed by others are to be adopted as the baseline requirement.
5. For refurbishment, modernisation and conversion of existing facilities the applicable BPS may need to be varied to get the best fit with the layout and structure of the existing facility.
6. Each BPS is set out in four sections plus a Design Library and includes functional and space standards, cost estimates and any guidance specific to the standard:
 - i. Section 1 Introduction.
 - ii. Section 2 Space Standards.
 - iii. Section 3 Financial Outputs.
 - iv. Section 4 Guidance and Examples.

Applicable legislation, MOD Policy and Industry Standards

7. References to specific parts of the **Building Regulations** are to the Building Regulations for England. Where appropriate, this should be read as the equivalent legislation in Scotland, Wales and Northern Ireland.

8. All relevant **legislation and regulations**, including those issued by MOD, are to be complied with for design, construction, technical safety of equipment and installations, health and safety, and the environment. Guidance issued by MOD on compliance with legislation and regulations and where industry/private sector standards do not fully meet defence requirements shall be followed. If compliance with the guidance would entail excessive cost clarification should be sought from the author of that guidance.

9. **Overseas**, MOD will apply UK standards where reasonably practicable and, in addition, respond to relevant host nation expectations.

10. **Disabled employees or Service dependants** are not referred to with specific provision within the BPS. Where applicable build designs shall comply with Part M of the Building Regulations which reflect the requirements of the Equalities Act 2010. In exceptional cases where this is not practicable a determination must be obtained at the design stage by formal submission to DIO Building Standards who are the Technical Authority with respect to these.

11. **Fire safety**; The DFSS regulates fire safety across Defence and all building control bodies (including approved inspectors) have a duty to consult with the DFSS before passing plans for works on the MOD estate. The provision of fire safety advice and guidance is provided by the DFRMO and infrastructure fire protection advice by the DIO Senior Fire Safety Manager.

12. **Security requirements** shall be implemented in accordance with JSP 440. The security measures must be agreed with the appropriate security authority.

13. **Telecommunication and Information Systems**. The BPS provide the standard user requirement within each type of space and provide an indication of the scale and scope of the works required. However, the detailed requirements for telecommunications and information systems must be briefed by the Communications Installation Design Authority prior to tendering the Works.

14. **Building Information Modelling (BIM)**. The adoption of BIM Level 2 is mandated by the Government Construction Strategy for UK Government Departments. The BIM information shall encompass:-

- i. The production, sharing and storage of 3D digital models.
- ii. The digital information, documents and data that supports the Employers Asset
- iii. Information Requirements and other stakeholder information requirements.

15. **Construction Technical Standards**. These identify the features, attributes, systems or methods of working required for infrastructure components and solutions. These shall be consulted in the development of a project and include:

- i. The Defence Related Environmental Assessment Methodology (DREAM) sets the minimum overall environmental performance of a building.
- ii. Common Minimum Standards for Construction (CMS) which set out the mandatory standards for construction that are to be used project teams in Government projects.
- iii. Government Buying Standards which set out the mandatory product specifications for central government departments and related organisations.
- iv. Crime Prevention. Crime Prevention through Environmental Design is a multi-disciplinary approach to deterring criminal behaviour through environmental design that must be considered at the planning stage to ensure that security can be incorporated into the design and layout of a project in a cost-effective way.

Section 2 – Governance, Maintenance and Transitional Arrangements

GOVERNANCE

Roles and Responsibilities

1. **DCDS (MilCap)** is the Infrastructure Defence Authority and owner of JSP 315
2. **FMC Cap Infra HD** in support of DCDS(MilCap) will:
 - i. Represent DCDS(MilCap) on the BPS Steering Group;
 - ii. Agree the programme of BPS development and reviews to be completed by DIO.
3. **DIO Director S&P** is the nominated Technical Authority for the BPS, Design Library and supporting guidance. The role includes monitoring and measuring the benefits of the change from Accommodation Scales to BPS, the continuous development of BPS and how effectively they are embedded in estate planning and delivery processes.
4. **DIO Infrastructure Policy and Standards Group (IP&SG)** in support of DIO Director S&P is responsible for maintenance of BPS, Design Library and supporting guidance and will:-
 - i. Be the principle point of contact for day to day queries, clarifications and maintenance of the BPS;
 - ii. Monitor how well the published BPS meet user requirements and changes to industry benchmarks and standards;
 - iii. Be accountable for completing a prioritised programme of BPS reviews directed by the Steering Group;
 - iv. Make recommendations for changes to BPS supported by evidence and explanation as to why they are necessary, including details of expected outputs / benefits and affordability issues (capital and whole life costs);
 - v. Maintain and improve the BPS within the following delegated authority limits:
 - a. Minor space and specification changes within existing MOD policy. Minor defined as changes that do not increase the cost of an asset or reduce the users operating space.
 - b. Clarifications to existing standards.
 - c. Expanding the standardisation of facilities and components.

- d. Additions to the Design Library that demonstrate or clarify existing standards.
 - vi. A clear Log of Changes is to be maintained and presented to the Working and Steering Groups for review.
 - vii. All changes to benchmarking are to be reviewed by the Steering Group before adoption. This excludes changes in the inflation indexation which will be implemented every 3 months.
- 5. Steering Group.** Joint Chair – FMC Cap Infra Hd and DIO Director S&P.
(Secretariat – DIO)

The Steering Group will; -

- i. Provide overall direction on the construct of BPS, Design Library and supporting guidance
- ii. Agree the prioritisation of BPS development and reviews
- iii. Monitor delivery against the prioritisation.
- iv. Scrutinise the business case for proposed changes to BPS
- v. Approve changes to the BPS following direction from DCDS(MilCap) where there is no agreement on a proposed change across Stakeholders and/or where there would be a significant impact on MOD policy, funding or capability.

Membership to comprise 1 key representative from FMC, DIO, Navy, Army, Air, JFC, DE&S, DPAS/Scrutiny, DEO, SEE, SD and PPD. Members are to act as Champions for JSP 315 and BPS within their respective organisations, nominate a Core Working Group member and ensure sufficient resources are committed to support the development of BPS to the agreed timescale.

6. Core Working Group. Chair – DIO Head IP&SG (Secretariat – DIO)

The Core Working Group will; -

- i. Take note of the Steering Groups overall direction and prioritisation of development
- ii. Review and comment on the proposed scope, objectives of each standard and advice of any SME, Capability lead or other stakeholder against value for money criteria.
- iii. Make proposals to DIO for changes to BPS with supporting evidence on the need for the change.
- iv. Identify relevant Capability and Technical leads that DIO must consult in developing and reviewing BPS

- v. To agree the final draft of any standards, guidance, drawings, evidence and comments that are to be submitted to the Steering Group.

Membership to comprise 1 key stakeholder from, Navy, Army, Air, JFC, DE&S, FMC, DIO, DEO, SEE, SD and PPD plus appropriate SME from DIO and Capability lead from FLC as required.

Compliance and Assurance

- 7. Main Gate Business Cases must clearly articulate variations from the BPS in terms of;
 - i. Functional and capability requirements;
 - ii. Quality standards;
 - iii. Size, scale, volume;
 - iv. Capital expenditure;
 - v. Operational expenditure;
 - vi. Operational performance.
- 8. Application of the BPS in meeting of User requirements must be assessed as part of the project review process. Any deficiencies in the BPS to meet User requirements must be reported to the DIO focal point for the BPS.

On-going review and maintenance

- 9. BPS will be reviewed on a prioritised rolling programme. The programme will be informed by changes to; defence requirements, industry benchmarks and standards, legislation, technology and best practice. Reviews need to take account of the following;
 - i. Completed projects out-turn performance in comparison to the planned performance;
 - ii. Industry benchmarks and standards;
 - iii. Military requirements, in particular capabilities supported by the particular type of accommodation.

Transitional Arrangements

- 10. JSP 315 Building Performance Standards (BPS) set, with the agreement of the MOD Investment Approvals Committee, the reference point for defence accommodation requirements. In 2017 'Interim Guidance' was issued to capitalise on savings identified during the development of BPS. Where published BPS now replace JSP 315 Accommodation Scales and the Interim Guidance issued in 2017.

The following transition procedures shall apply to all current works projects:

- i. All works projects that have not yet commenced their 'Development of the Preferred Option' phase (i.e. pre-Initial Gate approval) are to adopt the revised

standards. Projects that are currently in the Assessment Study phase should provide a 'time and cost impact statement' on the adoption of the revised standards for consideration by the approvals authority.

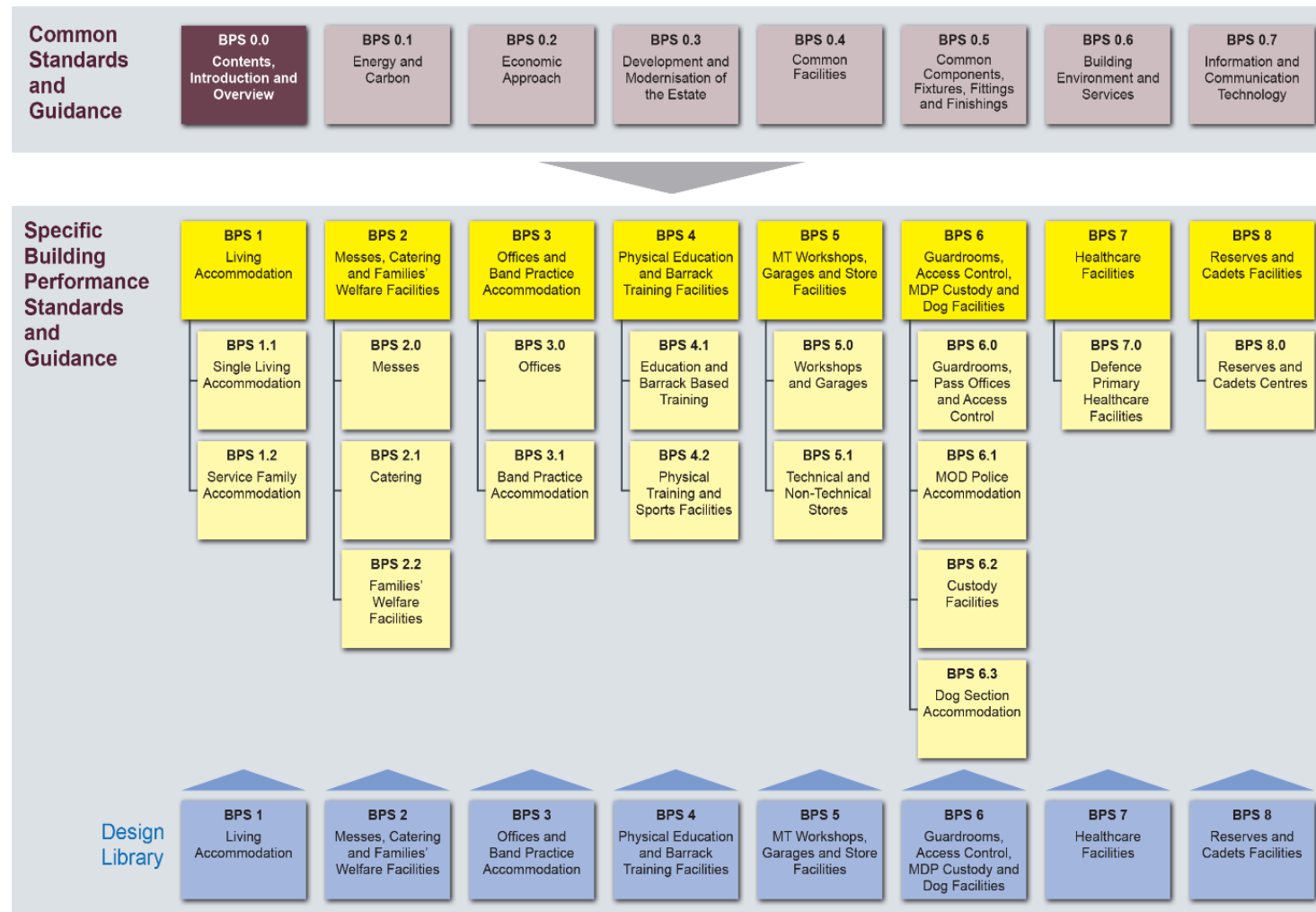
- ii. Works projects that are currently in the 'Development of the Preferred Option' phase but have yet to be issued for tender should adopt the standards where it is Value for Money to do so. For example, should the time and cost of change exceed the savings provided by the revised standards, the previous accommodation scales should be progressed to tender.
- iii. Projects that are out to tender or have been tendered by a works contractor shall continue using the previous accommodation scales. Any 'change' issued to the contractor during the construction phase should be based on the new standards where it is Value for Money to do so.

Section 3 – BPS Overview

Structure

1. BPS is split into two sections-
 - i. **Estate Wide Common Standards and Guidance.** Cover MOD requirements applicable to all accommodation and to be referenced in conjunction with specific BPS.
 - ii. **Specific Building Performance Standard.** Primarily cover the functional and space standards, costs estimates and any guidance specific to the standard. There are 8 main BPS with supplementary BPS for similar type functional buildings. Additional BPS will be added as they are developed.
 - See Fig 3.1 for the **BPS Structure and Index**
 - See Table 3.2 for the mapping of BPS against the Accommodation Scales
2. Each BPS is set out in four sections plus a Design Library and includes functional and space standards, cost estimates and any guidance specific to the standard:
 - i. Section 1 Introduction.
 - ii. Section 2 Space Standards.
 - iii. Section 3 Financial Outputs.
 - iv. Section 4 Guidance and Examples.
3. The Design Library is published in two parts: -

- i. Part 1 of the library contains the reference exemplar plan drawings, Schedule of Areas and Auto Selector Calculator guidance and details of generic areas/rooms, Room Data Sheets (RDS) that detail the components, fixtures, fittings, finishing's and environmental requirements that will meet the standards.
- ii. Part 2 of the library is for use by DIO and its Professional Support Providers.
- iii. Fig 3.1 BPS Structure and index



3.The superseded Accommodation Scales are mapped against the BPS in Table 3.1.

Table 3.1 Status of Previous JSP 315 Accommodation Scales

Previous JSP 315 Accommodation Scale	Status
1 Main Introductory Notes	Replace by BPS 0.0 to 0.7
2 Band Accommodation	Replaced by BPS 3.1
3 Junior Servicemen & Women's Single Living Accommodation	Replaced by BPS 1.1
4 Custody Facilities	Replaced by BPS 6.2
5 Training Camps	Extant until replaced by to BPS 4.3
6 Assize Courts-Martial Centres	Discontinued
7 Churches and Church Halls	Discontinued
8 Armed Forces Careers Offices	Discontinued
9 Civilian Staff Catering Facilities	Replaced by BPS 2.0
10 MOD Police Accommodation	Replaced by BPS 6.1
11 MOD Fire Stations	Extant until added to BPS 5.0
12 MOD Guard Service and Northern Ireland Security Guard Service Accommodation	Replaced by BPS 6.0
13 Dog Section Accommodation	Replaced by BPS 6.3
14 Educational and Indoor Military Training Accn	Replaced by BPS 4.1
15 Garages Cycle Sheds and Parking for Privately Owned Vehicles	Replaced by BPS 0.4
16 Guard Rooms	Replaced by BPS 6.0
17 Ground Support Equipment Accommodation	Extant until added to BPS 5.0
18 Officers' Families' Quarters	Replaced by BPS 1.2

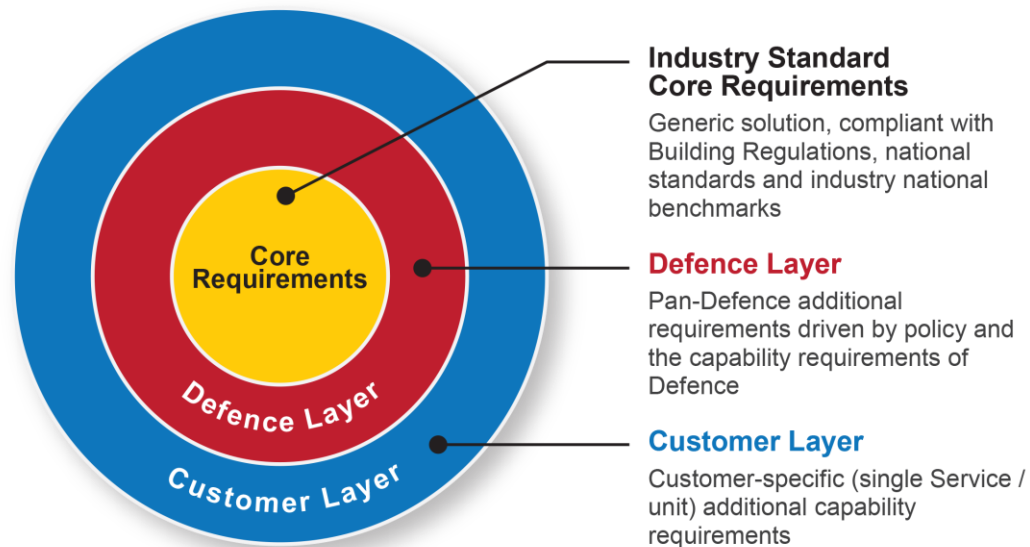
Previous JSP 315 Accommodation Scale		Status
19	Servicemen's Families' Quarters	Replaced by BPS 1.2
20	Families' Quarters Stores	Extant until added to BPS 5.1
21	Families' Quarters Estates; Community Centres	Replaced by BPS 2.2
22	Mechanical Transport Accommodation	Replaced by BPS 5.0
23	Medical and Dental Accommodation	Replaced by BPS 7.0
24	Messes: Officers' - Public Rooms	Replaced by BPS 2.0
25	Messes: Officers' - Single Sleeping Quarters	Replaced by BPS 1.1
26	Messes: Officer Cadets' - Single Sleeping Quarters	Replaced by BPS 1.1
27	Messes: Senior Non-Commissioned Officers' - Public Rooms	Replaced by BPS 2.0
28	Messes: Senior Non-Commissioned Officers' – Single Sleeping Quarters	Replaced by BPS 1.1
29	Service Catering Facilities	Replaced by BPS 2.1
30	Changing/Locker Rooms	Replaced by BPS 0.4
31	NAAFI Families Shops (UK)	Discontinued
32	NAAFI Families Shop and Messing Store (Overseas except Germany)	Discontinued
33	NAAFI Families Shop and Messing Store (Germany)	Discontinued
34	Obstacle Courses	Replaced by BPS 4.1
35	Offices	Replaced by BPS 3.0
36	Parade Grounds	Replaced by BPS 4.1
37	Crew Room and Rest Room Accommodation	Replaced by BPS 0.4
38	Physical and Recreational Training Facilities	Replaced by BPS 4.2
39	Small Arms Ranges	Withdrawn - Refer to JSP 403

Previous JSP 315 Accommodation Scale		Status
40	Postal and Courier Services Accommodation	Extant until replaced by BPS 3.2
41	Social Clubs	Replaced by BPS 2.0
42	Amenity (Catering, Leisure and Retail) Facilities for Junior Ranks in Great Britain	Replaced by BPS 2.0
43	Non-Technical Stores	Replaced by BPS 5.2
44	Technical Stores	Replaced by BPS 5.2
45	Respirator Testing Chambers	Replaced by BPS 4.1
46	Unit Shops/Trade Workshops	Extant until added to BPS 5.2
47	TAVRA Accommodation	Replaced by BPS 8.0

Requirements

4. The technical, functional and spatial standards have been derived from the requirements and built up in layers to allow benchmarking with industry and OGD. This is shown in Figure 1 below where:

- i. Industry Standard Core requirements compares well to modern industry standards and best practice.
- ii. Defence Layer means the military capability requirements for Defence policy such as CTM, BRCS, security and fire,
- iii. Customer Layer means the customer capability requirements for the unit specific requirements over the regular standard of provision. These requirements will need to be specifically approved by the Budget Holder.



5. The standards in the BPS are the Industry Standard Core Requirements and the Defence Layer requirements only. Any Customer Layer requirements must be added to the schedule of areas and any calculator or Auto Selector included within the BPS. Where space is derived by the Auto Selector that is not needed to meet the requirements this space should be omitted as a negative in the Customer Layer.

Cost Data

6. Each BPS provides current cost data, produced by an 'Auto Selector' direct from a requirement input, an 'instant Rough Order Cost' (ROC) budget estimate which is aimed to be within the $\pm 20\%$ range. Where an Auto Selector could not be provided, (such as to diverse requirements), a standard Schedule of Areas is provided which may be adjusted to the actual requirement and then multiplied by the Benchmark Costs in BPS 0.2 to provide the ROC estimate. These ROC are expected to help inform the change initiatives, the resulting Infrastructure Sub-Portfolios and the development of the Statement of Need. It will also assist the early DIO Project Stages; Stage 0, 1 and 2 (Identify Project, Set-Up Project and Feasibility Study) with the corresponding Decision Points and Gateway Review during this period.
7. Cost data from initial estimate to completion has been standardised, permitting immediate benchmarking against industry standards, other government departments and other elements that are necessary to deliver the specific military capability or processes. (See BPS 0.2)