7. Product Realization

### 7.1 Planning of Product Realization (Comply)

The organisation shall plan and develop the processes needed for product realization. Planning of product realization shall be consistent with the requirements of the other processes of the quality management system (see 4.1).

The planning of the services provided by ID is articulated via the processes defined on the DEQMS.

In planning product realisation, the organisation shall determine the following, as appropriate:

- quality objectives and requirements for the product;
- the need to establish processes and documents, and to provide resources specific to the product;
- required verification, validation, monitoring, measurement, inspection and test activities specific to the product and the criteria for product acceptance;
- records needed to provide evidence that the realisation processes and resulting product meet requirements (see 4.2.4).

The output of this planning shall be in a form suitable for the organisation’s method of operations.

### 7.2 Customer-Related Processes (Comply)

#### 7.2.1 Determination of requirements related to the product

The organisation shall determine:

- requirements specified by the customer, including the requirements for delivery and post-delivery activities,
- requirements not stated by the customer but necessary for specified or intended use, where known,
- statutory and regulatory requirements related to the product, and
- any additional requirements determined by the organisation.

See additional notes on this Clause:
- Strategy & Concepts: All processes
- Risk Mitigation & Requirement Setting: All processes
- Acquisition: All processes
- In-Service & Disposal: All processes
- Committees: PWC
- Governance: Management Forum – In-Depth Reviews
- Governance: Project Governance Board

Defined in the various processes on the DEQMS:

Also defined by standards being developed by ID:

Policy: Engineering and Maintenance
Policy: Environmental Management
Input into Statutory Reporting: Portfolio Budget Statements, Portfolio Additional Estimate Statements, Defence Annual Report

Defined in the various processes on the DEQMS:

#### 7.2.2 Review of requirements related to the product

The organisation shall review the requirements related to the product. This review shall be conducted prior to the organisation’s commitment to supply a product to the customer (e.g. submission of tenders, acceptance of contracts or orders, acceptance of changes to contracts or orders) and shall ensure that:

- product requirements are defined,
b) contract or order requirements differing from those previously expressed are resolved, and
c) the organisation has the ability to meet the defined requirements.

Records of the results of the review and actions arising from the review shall be maintained (see 4.2.4).

Where the customer provides no documented statement of requirement, the customer requirements shall be confirmed by the organisation before acceptance.

Where product requirements are changed, the organisation shall ensure that relevant documents are amended and that relevant personnel are made aware of the changed requirements.

7.2.3 Customer communication

The organisation shall determine and implement effective arrangements for communicating with customers in relation to

a) product information,
b) enquiries, contracts or order handling, including amendments, and
c) customer feedback, including customer complaint

7.3 Design and Development (Comply)

7.3.1 Design and development planning

The organisation shall plan and control the design and development of product.
## During the design and development planning, the organisation shall determine:

| a) the design and development stages | Design stages are defined in the procedures, particularly Risk Mitigation & Requirement Setting and Development & Delivery. |
| b) the review, verification and validation that are appropriate to each design and development stage, and | Review, verification and validation (as applicable) are defined in the procedures, particularly Risk Mitigation & Requirement, Development & Delivery. |
| c) the responsibilities and authorities for design and development. | Responsibilities are defined in the procedures, particularly Requirement Setting and Development, Development & Delivery. |

The organisation shall manage interfaces between different groups involved in design and development to ensure effective communication and clear assignment of responsibility

| Interfaces are defined in the procedures, particularly Requirement Setting and Development, Development & Delivery. |

Planning output shall be updated, as appropriate, as the design and development progresses.

| Outputs are defined in the procedures, particularly Requirement Setting and Development, Development & Delivery. |

### 7.3.2 Design and development inputs

Inputs relating to product requirements shall be determined and records maintained (see 4.2.4). These inputs shall include:

| a) functional and performance requirements, | See additional notes on this Clause |
| Strategy & Concepts: All processes |
| Risk Mitigation & Requirement Setting: All processes |
| Acquisition: All processes |
| In-Service & Disposal: All processes |
| Committees: PWC |
| Governance: Management Forum – In Depth Reviews |
| Governance: Project Governance Board |
| Functional and performance requirements applicable to projects are generally defined in the procedures, particularly Risk Mitigation & Requirement Setting and Development & Delivery. |

| b) applicable statutory and regulatory requirements, | Legislation: *Work Health and Safety Act (Cth)* 2011 |
| Policy: Engineering and Maintenance |
| Policy: Environmental Management |
| ID input into Statutory Reporting: Portfolio Budget Statements, Portfolio Additional Estimate Statements, Defence Annual Report |

| c) where applicable, information derived from previous similar designs, and | If applicable, this will be included during the IBC and DBC processes. |
| other unit projects will consider these as they are relevant (e.g. heritage or |
### 7.3.3 Design and development outputs

The outputs of design and development shall be in a form suitable for verification against the design and development input and shall be approved prior to release.

**Design and development outputs shall:**

- meet the input requirements for design and development,
- provide appropriate information for purchasing, production for service provision,
- contain or reference product acceptance criteria, and
- specify the characteristics of the product that are essential for its safe and proper use.

### 7.3.4 Design and development review

At suitable stages, systematic reviews of design and development shall be performed in accordance with planned arrangements (see 7.3.1)

- to evaluate the ability of the results of design and development to meet requirements, and
- to identify any problems and propose necessary actions.

Participants in such reviews shall include representatives of functions concerned with the design and development stage(s) being reviewed. Records of the results of the reviews and any necessary actions shall be maintained (see 4.2.4).

- See additional notes on this Clause (relating to Clause 7.2-7.5 generally)
- Strategy & Concepts: All processes
- Risk Mitigation & Requirement Setting: All processes
- Acquisition: All processes
- In-Service & Disposal: All processes
- Committees: PWC
- Governance: Management Forum – In Depth Reviews
- Governance: Project Governance Board

### 7.3.5 Design and development verification

Verification shall be performed in accordance with planned arrangements (see 7.3.1) to ensure that the design and development outputs have met the design and development input requirements. Records of the results of the verification and any necessary actions shall be maintained (see 4.2.4).

- See additional notes on this Clause (relating to Clause 7.2-7.5 generally)
- Design verification as intended by this clause of the standards is not undertaken by ID. Projects have defined stages that address the necessary verification.

### 7.3.6 Design and development validation

Design and development validation shall be performed in accordance with planned arrangements (see 7.3.1) to ensure that the resulting product is capable of meeting the requirements for the specified application or intended use, where known. Wherever practicable, validation shall be completed prior to the delivery or implementation of the product. Records of the results of validation and any necessary actions shall be maintained (see 4.2.4).

- See additional notes on this Clause (relating to Clause 7.2-7.5 generally)
- Design verification as intended by this clause of the standards is not undertaken by ID. Projects have defined stages that address the necessary verification.

### 7.3.7 Control of design and development changes

- Requirements are generally defined in the DEQMS.
- Processes on the DEQMS define the necessary reviews.
Design and development changes shall be identified and records maintained. The changes shall be reviewed, verified and validated, as appropriate, and approved before implementation. The review of design and development changes shall include evaluation of the effect of the changes on constituent parts and product already delivered. Records of the results of the review of changes and any necessary actions shall be maintained (see 4.2.4).

| See additional notes on this Clause (relating to Clause 7.2-7.5 generally) |
| Strategy & Concepts: All processes |
| Risk Mitigation & Requirement Setting: All processes |
| Acquisition: All processes |
| In-Service & Disposal: All processes |
| Committees: PWC |
| Governance: Management Forum – In Depth Reviews |
| Governance: Project Governance Board |

### 7.4 Purchasing (Comply)

#### 7.4.1 Purchasing process

The organisation shall ensure that purchased product conforms to specified purchase requirements. The type and extent of control applied to the supplier and the purchased product shall be dependent upon the effect of the purchased product on subsequent product realisation or the final product.

**See additional notes on this Clause**

- Development & Delivery: Pre Planning - Project Planning
- Governance: Project Governance Board
- Business support: Panels
- Business support: Suite of Contracts

The organisation shall evaluate and select suppliers based on their ability to supply product in accordance with the organisation’s requirements. Criteria for selection, evaluation and re-evaluation shall be established. Records of the results of evaluations and any necessary actions arising from the evaluation shall be maintained (see 4.2.4).

**See additional notes on this Clause**

- Development & Delivery: Pre Planning - Project Planning
- Governance: Project Governance Board
- Business support: Panels
- Business support: Suite of Contracts

#### 7.4.2 Purchasing information

Purchasing information shall describe the product to be purchased, including where appropriate:

- a) requirements for approval of product, procedures, processes and equipment,
- b) requirements for qualification of personnel, and
- c) quality management system requirements.

The organisation shall ensure the adequacy of specified purchase requirements prior to their communication to the supplier.

**See additional notes on this Clause**

- ID procurement processes address these as required. The existing panel arrangements further enhance these requirements.

#### 7.4.3 Verification of purchased product

The organisation shall establish and implement the inspection or other activities necessary for ensuring that purchased product meets specified purchase requirements.

Where the organisation or its customer intends to perform verification at the supplier's premises, the organisation shall state the intended verification arrangements and method of product release in the purchasing information.

**See additional notes on this Clause**

- Additional specific notes are provided against each clause (where applicable). ID does not normally require this to occur. Required, the required arrangements would be written into the appropriate contract.

### 7.5 Production and Service Provision

#### 7.5.1 Control of production and service provision

The organisation shall plan and carry out production and service provision under controlled conditions. Controlled conditions shall include, as applicable

<table>
<thead>
<tr>
<th>a) the availability of information that describes the characteristics of the product, Comply</th>
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</thead>
<tbody>
<tr>
<td>See additional notes on this Clause</td>
</tr>
<tr>
<td>Strategy &amp; Concepts: All processes</td>
</tr>
<tr>
<td>Risk Mitigation &amp; Requirement Setting: All processes</td>
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<tr>
<td>Acquisition: All processes</td>
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<tr>
<td>In-Service &amp; Disposal: All processes</td>
</tr>
<tr>
<td>Committees: PWC</td>
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<tr>
<td>(b) the availability of work instructions, as necessary,</td>
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<td>(c) the use of suitable equipment,</td>
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<tr>
<td>(d) the availability and use of monitoring and measuring equipment,</td>
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<tr>
<td>(e) the implementation of monitoring and measurement, and</td>
</tr>
<tr>
<td>(f) the implementation of product release, delivery and post-delivery activities</td>
</tr>
</tbody>
</table>

### 7.5.2 Validation of processes for production and service provision (NOT Applicable to ID)

#### 7.5.3 Identification and traceability

Where appropriate, the organisation shall identify the product by suitable means throughout product realisation. The organisation shall identify the product status with respect to monitoring and measurement requirements throughout product realization.

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<tr>
<th>Comply</th>
<th>• See additional notes on this Clause</th>
</tr>
</thead>
</table>

Where traceability is a requirement, the organisation shall control the unique identification of the product and maintain records (see 4.2.4).

| Comply | • Quality Manual for key sections:  
|        |   - Control of Documents and Records  
|        |   - Records Management using Objective |

### 7.6 Control of Monitoring and Measuring Equipment (NOT Applicable to ID)

**NON Applicable AS/NZS 9001:2008 Standard Clauses**

<table>
<thead>
<tr>
<th>7.5.2 Validation of processes for production and service provision</th>
<th>ID does not undertake any processes that cannot be tested.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5.5 Preservation of product</td>
<td>ID does not undertake preservation of product as intended in AS/NZS ISO 9001:2008</td>
</tr>
<tr>
<td>7.5.4. Customer property</td>
<td>ID provides services to Defence. ID is part of Defence. The intent of this clause is not applicable to ID.</td>
</tr>
<tr>
<td>7.6 Control of monitoring and measuring equipment</td>
<td>ID does not have any equipment that requires calibration.</td>
</tr>
</tbody>
</table>

### Additional Notes on Clause 7

This section provides specific interpretations to some of the clauses of the Quality Management standard. Interpretation is only provided where necessary and reflects the application of the clause within ID. These notes need to be read in conjunction with any notes on clause.

ISO9001: Clause 7.1.
Each key process within the ID delivery model provides the necessary planning for product realisation as defined in AS/NZS ISO 9001:2008.

ISO9001: Clause 7.2, 7.3, 7.4, 7.5. (Generally)

The intent of these clauses in AS/NZS ISO 9001:2008 is to describe the typically commercial process of responding to a request for service provision, and then, after successful contract negotiations, deliver the required service.

ID is a branch of the Commonwealth Government (Defence), providing services to Defence. There are no commercial arrangements. ID is also charged with the responsibility of developing processes that match the responsibility of delivering the required services for Defence. The latter responsibilities result in ID defining the process and customer/stakeholder “requirements aligning with the relevant process.

The project outcomes of the processes are overseen by delegated authorities. For capital projects in excess of $8m, this overseer is the Management Forum – In Depth Review. “Success” is measured by endorsement of project proposals reviewed by the delegate. All projects require “sponsor” endorsement, irrespective of the capital value.

Other units in ID charged with meeting Defence policy objectives (e.g. environment, heritage, property disposal, fire, electrical, civil) define the processes appropriate for the services to be delivered. These processes are delivered on behalf of Defence as part of its responsibility to comply with legislation. The “customer” in these cases is essentially the Secretary of Defence and the Chief of the Defence. ID is fulfilling its role relating to a “building owner”, hence, the commercial world model does not apply to ID. However, the principles are applicable, and the process descriptions embed the in various requirements and endorsements.

Projects are prioritised and delivered in priority order. Resource capacity does not influence project delivery in the standard commercial context. If projects require additional resources, other projects may be put on hold to meet changed priorities.

The best summary is that in a commercial world involving a service provider (as ID is), the certified agency markets their products and negotiates contracts by entering into transactions with the customer that will involve defining how the business will be done and how the services will be tailored to meet the needs of the customer. In ID, other areas of Defence bid for funds to deliver projects. There are no commercial negotiations, and ID specifies how the business process will be transacted. The delegates (Branch Heads, FASI) measure success through the project endorsement process built into the various processes associated with project delivery. The DEQMS and the associated processes are available to all Defence through the Defence Intranet (DEFWEB) and to external stakeholders via the Defence Internet.

ISO9001: Clause 7.2.

A specific requirement relates to the provision of customer feedback, including customer complaints. ID obtains customer feedback via the DEQMS (refer to “Contact Us” button on all screens – top menu) and surveys. ID also obtains feedback on projects via the approval process. Each project development requires sponsor endorsement. The process of sponsor endorsement and subsequent reviews provides the necessary feedback mechanism currently considered sufficient by ID.

ISO9001: Clause 7.4.

ID is part of the Commonwealth Government (Defence). As a Government agency, Defence has an obligation to conduct purchasing activities in accordance with published Government procurement guidelines. These guidelines exist at a “Whole of Government” level.

ID has developed standard processes for major acquisition processes alongside a standard suite of construction contracts. Procurement of consultants is via the use of panels.

Other minor procurement processes are undertaken in accordance with the Defence Procurement Policy Manual (DPPM) and Commonwealth Procurement Guidelines (CPG) and utilise standard government supply contracts. Often, these minor purchases are provided through Non Equipment Procurement and Contracting (NEP&C) which is part of E&IG with the procurement activity managed by COO.

ISO9001: Clause 7.5.3.

All capital works projects are allocated a number and recorded on the DEMS/IBIS system. Project directories are also established to store project documents and records. The file system within ID provides the necessary identification and traceability.