1. **Statement**

This Standard outlines the minimum requirements for identifying, managing and reporting on Critical ICT Systems and At-Risk Systems, and the reporting requirements for unsupported technologies that may therefore impact the Queensland Health ICT environment. This standard does not include technical infrastructure and devices that may be deemed as critical, and that may support critical ICT systems.

By complying with this Standard, Queensland Health gains an understanding of what ICT systems, including their supporting technologies, are critical to the primary functions of the Department. This in turn promotes appropriate business continuity and ICT service continuity planning, improved responses in an emergency and improved resource allocation.

2. **Scope**

Compliance with the requirements in this Standard is mandatory and governed by the Architecture Standards Committee (ASC).

This Standard applies to all employees, contractors and consultants within the Department of Health divisions and commercialised business units.

This Standard can be used by Hospital and Health Services as a base for a Hospital and Health Service specific standard.

3. **Requirements**

All ICT systems that upon failure or underperformance would represent a significant risk to Queensland Health operations and hence the needs of our patients, represent a large investment, or have a wide scope of use must be identified and assessed for criticality.

All ICT systems that have been identified as having unmitigated residual risk levels of High or Very High, or are supported by unsupported technologies must be reviewed on at least a biannual basis and reported on annually as outlined in the QGEA ICT Profiling standard.

In addition, under the Queensland Government Chief Information Office (QGCIO) ICT resources strategic planning policy (IS2), Queensland Health is required to provide the QGCIO with reports on the ICT environment, including critical and At-Risk ICT systems, annually.

3.1 **Identification of Critical ICT systems**

Queensland Health needs to ensure it appropriately focuses on ICT systems that are deemed critical to the operation of Queensland Health services. This is enabled through the assessment of ICT systems against various areas of impact to the business (e.g. materially impact delivery of clinical services, have a material impact on the Department’s financial performance, etc). All ICT systems that score a 4 or above on any business impact risk assessment item are classified as “Critical ICT Systems” within the ICT Portal planning tool.

As a minimum, the following requirements must be met:

3.1.1 All existing ICT systems that upon failure or underperformance would represent a significant risk to the business, represent a large investment or have a wide scope of use, must have an Application Custodian and Manager assigned, and be assessed and documented in the ICT Planning Porta when transitioning to the production environment.
3.1.2 All new ICT systems that fall within this scope must be documented in the ICT Planning Portal and have an Application Custodian and an Application Manager assigned.

3.1.3 Assessment as to whether an ICT system is critical shall be performed by the Application Custodian based on the critical systems assessment tool located on the ICT Planning Portal at: http://www.notes.health.qld.gov.au/divisions/id/spg/ICTPlanning/default.aspx

3.1.4 The Application Manager of a critical ICT system is responsible for ensuring the system is correctly profiled and registered on the library of critical ICT systems located on QHEPS.

3.2 Management and Reporting of Critical ICT Systems

Queensland Health must actively manage a record of all ICT systems designated as “critical” to the operation of Queensland Health services. Responsibilities are included below.

Application Custodians must ensure that:

3.2.1 Business continuity and disaster recovery plans are documented where they have a reliance on a critical system.

3.2.2 Individual ICT system profiles are reviewed at least annually as outlined in the QGEA ICT Profiling Standard or when significant changes are implemented.

3.2.3 All ICT systems designated as “critical” are reviewed on at least a biannual basis as outlined in the QGEA ICT Profiling standard.

Application Managers must ensure that:

3.2.4 The critical ICT system and any underpinning technology are subject to appropriate service management obligations and delivered to agreed service levels.

3.2.5 The critical ICT system and any underpinning technologies have appropriate IT service continuity, backup, data retention and disaster recovery capabilities.

3.2.6 The technical condition of the critical ICT system as-a-whole meets business continuity requirements.

3.2.7 Digital Architecture, eHealth Queensland are notified within one month of any Critical ICT Systems being decommissioned.

Digital Architecture, eHealth Queensland must:

3.2.8 Coordinate the review and submission of the critical systems in line with QGCIO IS2 guidelines.

3.2.9 Maintain the critical systems assessment tool located on the ICT Planning Portal.

3.2.10 Ensure a library of critical ICT systems is maintained and available on QHEPS.

3.2.11 Create an ability for application owners and custodians and investment decision makers to quickly identify what systems are critical.

3.3 Management and Reporting of At-Risk ICT systems and unsupported technology

In addition, ICT systems that when profiled by the ICT Portal planning tool identify as having untreated risks of High or Very High are classified as “At-Risk Systems”.

3.3.1 All ICT systems designated as “At-Risk systems” are to be reviewed by the Application Manager on at least a biannual basis as outlined in the QGEA ICT Profiling standard.

3.3.2 All unsupported technologies, as defined in the QGEA ICT Profiling Standard Appendix F, are to be identified and have profiles completed on the ICT Planning portal.

3.3.3 Digital Architecture, eHealth Queensland are responsible for the coordination and submission of At-Risk and unsupported technologies to the QGCIO annually.
4. Legislation

- Hospital and Health Boards Act 2011
- Information Privacy Act 2009
- Public Records Act 2002
- Public Service Act 2008
- Right to Information Act 2009

5. Supporting documents

Whole of Government

Department of Housing and Public Works, QGCIO:
- Queensland Government Enterprise Architecture Framework 2.0 (QGEA)
- Queensland Government Application Classification Framework
- Queensland Government Application Portfolio Framework Detail
- Queensland Government Information Classification Framework
- Queensland Government Information Principles
- ICT Resources Strategic Planning Policy (IS2)
- QGEA ICT Profiling Standard

Department of Health
- Data and Application Custodianship Roles and Responsibilities

Queensland Health
- Enterprise Application Architecture Standard
- Enterprise Information Architecture Standard
- Enterprise Technology Architecture Standard

6. Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical ICT System</td>
<td>An ICT system that is relied upon to the extent that an outage would pose significant risk to the business and therefore required a higher level of maintenance to ensure availability and performance. This is reflected in the ICT system having a consequence of failure of High or Very High according to the Department of Health risk analysis matrix. This would usually reference the business operation, delivery of safe clinical services, health service delivery or financial criteria.</td>
</tr>
<tr>
<td>Application / ICT System</td>
<td>A software system deployed by the agency which has part of an</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Application Custodian</td>
<td>A position designated with accountability for the development, management, care and maintenance of an Application.</td>
</tr>
<tr>
<td>Application Manager</td>
<td>A position designated with responsibility for the day-to-day management of an Application including the planning, development, installation, configuration, maintenance and support of the Application.</td>
</tr>
<tr>
<td>At-Risk ICT System</td>
<td>An ICT system that has a risk associated with it of High or Very High rating requires treatment. This does not include the inherent business risk of a Critical System or any other risk that has been accepted with no further treatments to occur.</td>
</tr>
<tr>
<td>Technologies</td>
<td>ICT hardware and software</td>
</tr>
<tr>
<td>Unsupported Technologies</td>
<td>All technologies that are beyond their extended support date.</td>
</tr>
</tbody>
</table>

**Version Control**

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>27/03/2018</td>
<td>New document. Approved by Architecture Standards Committee.</td>
</tr>
</tbody>
</table>

ICT Critical and At-Risk Systems: Identification and Reporting
Digital Architecture
eHealth Queensland
06/04/2018

PRINTED COPIES ARE UNCONTROLLED