

وزارة المواصلات والاتصالات  
MINISTRY OF TRANSPORT  
AND COMMUNICATIONS



# A Primer on OBASHI Framework

**Version 1.1**

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1.0	Published V1.0 document	June 2012
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## Legal Mandate(s)

Emiri decision No. (8) for the year 2016 sets the mandate for the Ministry of Transport and Communication (hereinafter referred to as “MOTC”) provides that MOTC has the authority to supervise, regulate and develop the sectors of Information and Communications Technology (hereinafter “ICT”) in the State of Qatar in a manner consistent with the requirements of national development goals, with the objectives to create an environment suitable for fair competition, support the development and stimulate investment in these sectors; to secure and raise efficiency of information and technological infrastructure; to implement and supervise e-government programs; and to promote community awareness of the importance of ICT to improve individual’s life and community and build knowledge-based society and digital economy.

Article (22) of Emiri Decision No. 8 of 2016 stipulated the role of the Ministry in protecting the security of the National Critical Information Infrastructure by proposing and issuing policies and standards and ensuring compliance.

This guideline has been prepared taking into consideration current applicable laws of the State of Qatar. In the event that a conflict arises between this document and the laws of Qatar, the latter, shall take precedence. Any such term shall, to that extent be omitted from this Document, and the rest of the document shall stand without affecting the remaining provisions. Amendments in that case shall then be required to ensure compliance with the relevant applicable laws of the State of Qatar.



## Introduction

**OBASHI** - A methodology for mapping and developing how IT systems relate to organizational operations (OBASHI stands for Ownership, Business Processes, Applications, Systems, Hardware, and Infrastructure).

The OBASHI methodology provides a framework and method for capturing, illustrating and modeling the relationships, dependencies and data flows between business and Information technology (IT) assets and resources in a business context.

It is a formal and structured way of communicating the logical and physical relationships and dependencies between IT assets and resources (Ownership, Business Processes, Applications, Systems, Hardware, and Infrastructure) to define the business services of a modern enterprise.

The name "OBASHI" is a licensed trademark of Stroma Software Ltd.

## OBASHI Methodology

### Core Principle

OBASHI is based around a core principle that IT exists for one reason, namely, to manage the flow of data between business assets.

Business resources (which include people) and IT assets are either providers of data, consumers of data or provide the conduit through which the data can flow.

The role of IT is to support process and optimize the flow of data to maximize business/organizational performance.

### The OBASHI Framework

These Layers provide the framework for organizing the elements that represent individual Business or IT assets / resources. The six layers are:

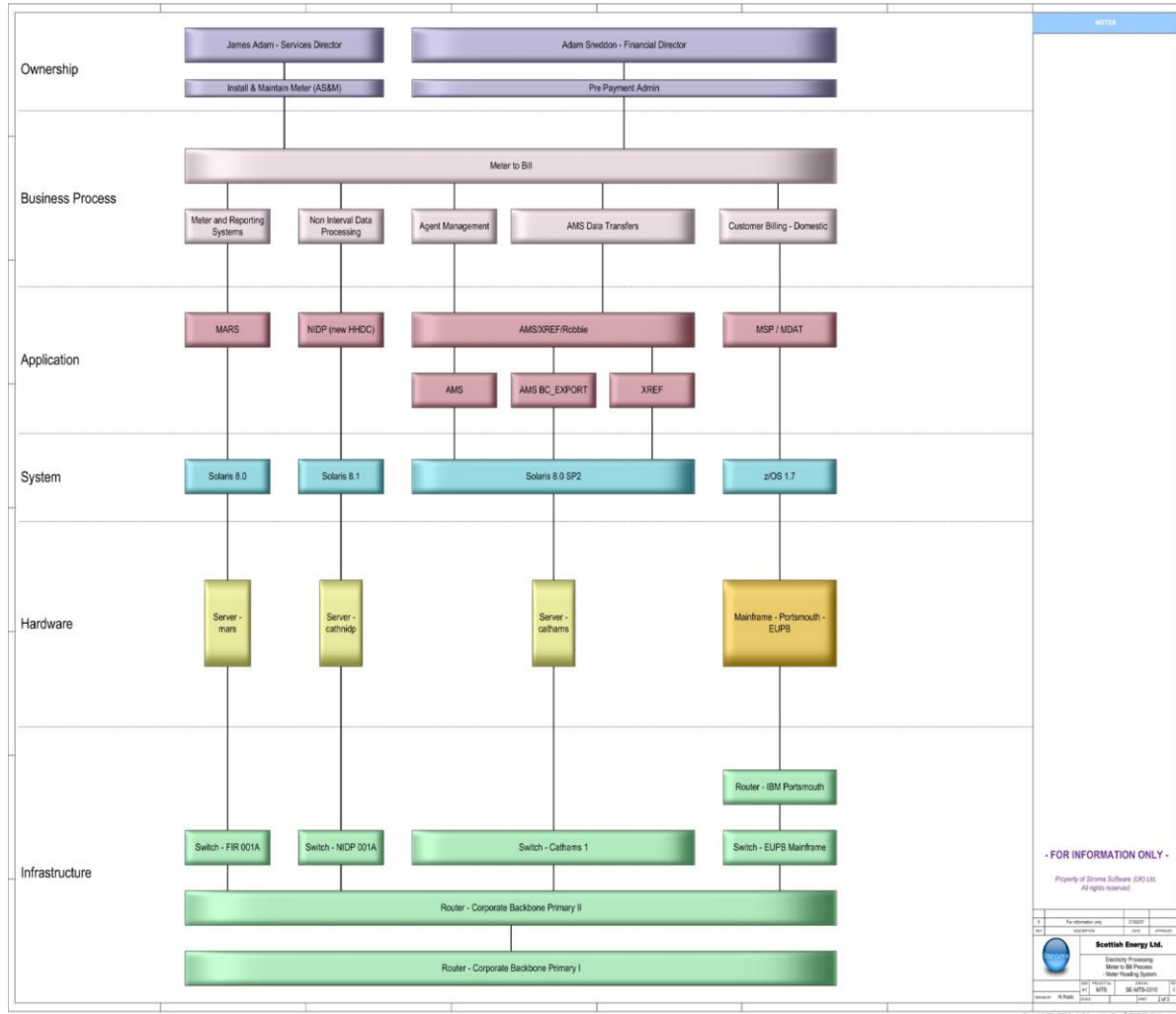
- [O](#)wnership
- [B](#)usiness Process
- [A](#)pplication
- [S](#)ystem
- [H](#)ardware
- [I](#)nfrastructure

They are collectively known as OBASHI

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 Billing and Revenue Management (BRM) 11.5.1  
 Meter to Bill Process  
 Meter-Reading System

## Ownership Layer

The Ownership Layer contains elements representing the person(s) or group(s) that 'owns', or is responsible for, business processes portrayed in the Business Layer. Ownership elements can be positioned beneath other ownership elements to create a hierarchy of owners. Example owners could be: "Accountancy", "Planning Manager", "Logistics", "New York", "Purchasing Officer" and "Environmental Health".





## **Business Layer**

The Business Layer contains elements representing the business processes or functions that are being used by the 'Owner(s)'. These elements are positioned under their appropriate 'Owner'. Examples could be: "Monthly Balance", "Sales Transactions", "Tank Stock Management", "Production Data" and "Capture Budgeting".

## **Application Layer**

The Application Layer contains elements representing software applications. These are positioned beneath the business processes that utilize them. Examples could include: "Excel", "Oracle", "Sage", "SAP" and "PeopleSoft".

## **System Layer**

The System Layer contains elements representing the operating systems on which the applications run. These elements are positioned beneath the appropriate applications. Examples could be: "Windows XP", "Unix", "Solaris", "Linux" and "Vista".

## **Hardware Layer**

The Hardware Layer contains elements representing the computer hardware on which the operating systems run. These elements are positioned beneath the appropriate operating systems. Examples could be: "Workstations", "Servers", "Laptops", "Tablet PCs", and "Mainframes".

## **Infrastructure Layer**

The Infrastructure Layer contains elements representing the network infrastructure into which the hardware is connected. Infrastructure elements can be positioned beneath other infrastructure elements to create a hierarchy that supports the business. Examples could be: "Switches", "Routers", "Multiplexers", "Bridges" and "Hubs".



## Guidelines:

- The OBASHI Framework comprises the following rules which govern the implicit and explicit relationships between elements.
- An element placed beneath or above another element has an implicit relationship with that element.
- All elements within the same layer have an implicit relationship to each other.
- Connected elements have an explicit relationship to each other, with the following rules governing connectivity:
  - A connection is a bi-directional relationship
  - An Infrastructure element may be connected to one or more Infrastructure or Hardware elements.
  - A Hardware element may be connected to one or more Infrastructure or System elements.
  - A System element may be connected to one or more Hardware or Application elements.
  - An Application element may be connected to one or more System, Application or Business elements.
  - A Business element may be connected to one or more Application, Business or Owner elements.
  - An Owner element may be connected to one or more Business or Owner elements.
  - A dependency is a uni-directional relationship i.e. element X may be dependent on element Y, but element Y might not be dependent on element X.
  - An element may have one or more instances within a layer.
  - An element can exist on more than one OBASHI diagram.
  - A dataflow comprises two or more connected elements.
  - A dataflow can contain one or more dataflows, enabling a hierarchy of dataflows.
  - A dataflow may span multiple Business and IT diagrams.