

**Challenges Faced by Communication Providers in Meeting
Regulatory Requirements: Analysis of Equivalence of Input and
Functional Separation**

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ITS Conference Presentation on Tuesday 24 June 2014, Brussels



Introduction

- ❖ Regulatory authorities, governing markets and industries around the world, aim to develop a fair and equivalent competitive market with low entry and exit barriers that provide customers with sufficient knowledge and information to enable them to switch between products, services and suppliers at will
- ❖ Equivalence of Input (EOI) and Functional Separation (FS) are mechanisms used by telecommunications regulatory authorities to achieve this objective
- ❖ This paper discusses and analyses legislations mandating the use of EOI and FS, in various geographies, and the challenges that the mechanisms impose on Significant Market Power (SMP) Telco organisations
- ❖ Furthermore, this paper provides a solution framework for Telco organisations to comprehensively address these challenges in their transformation programmes
- ❖ Research in the communications industry has established that telecoms regulatory authorities around the world are widely different, in the way that they operate, the composition of the regulatory board membership and external influences that impact upon them (ZABER, 2012)



Equivalence of Input and Functional Separation

- ❖ Equivalence of Input is defined by Ofcom (UK) as follows: “EOI is the concept established by the Ofcom undertakings in which British Telecom (BT) provides, in respect of a particular product or service, the same product or service to all Communication Providers (CP’s) (including BT) on the same timescales, terms and conditions (including price and service levels) by means of the same systems and processes, and includes the provision to all CP’s (including BT) of the same commercial information about such products, services, systems and processes” (OFCOM, 2005)
- ❖ In WEBB (2008: 3), functional separation is defined as:-
 - ❖ the establishment of a new business division, which is kept separate from the incumbent’s other business operations;
 - ❖ this separate business division providing wholesale access to the incumbent’s non-replicable (or bottleneck) assets, which are required by competitors in order to compete with the incumbent in downstream retail markets; and
 - ❖ the separate access services division being required to supply wholesale access to competitors, and the incumbent’s own retail divisions, on a non-discriminatory basis



Regulatory Direction

- ❖ Most effective way of delivering a telecoms market that serves the needs of its customers well is through competition between communications providers running their own networks
- ❖ In UK, OFCOM (2002) go on to explore the expectations and needs of residential and business users of the telecoms market, concluding that their requirement is for reliable service at lowest cost, but that they also want the ability to choose new products and services, to change their provider at will, and to have their choices/decisions fulfilled quickly
- ❖ To achieve these requirements, the competition has to be shown to be efficient, effective and long-lasting
- ❖ Crandall suggests that the requirement for service/communication providers to integrate their operations and share equipment and infrastructure, to create an environment facilitating fair and effective competition between suppliers, in itself, creates incentive issues encouraging incumbent operators to discriminate against 'the competition' (CRANDALL, 2013)
 - ❖ For example, consider an incumbent service provider, providing a range of narrow and broadband services where there is no alternate access network (such as cable) available. Without appropriate regulatory terms and conditions governing access rights to the network assets, there would be nothing to inhibit the incumbent from discriminating in favour of its own retail or business divisions



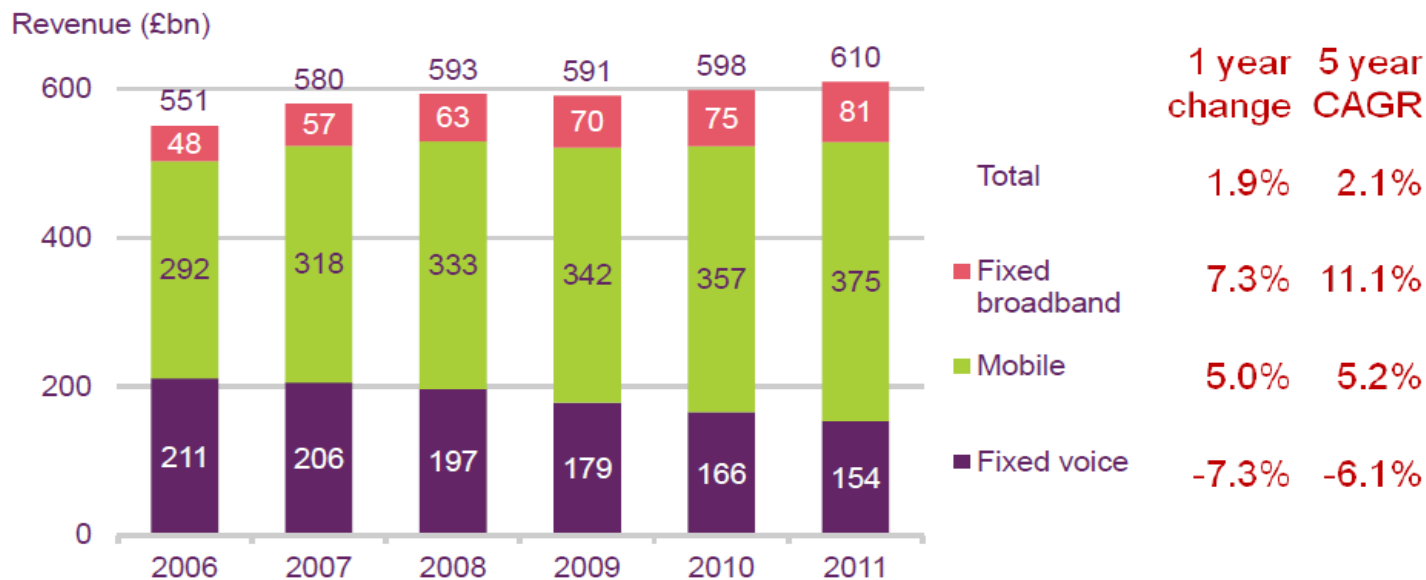
TSR Regulation in UK

- ❖ In April 2004 Ofcom, the communications regulator in the UK, launched its Strategic Review of Telecommunications (TSR)
- ❖ The main driver for the review was perception by BT's competitors that they were being unfairly discriminated against because of the different systems that BT used to supply services to them and to its own company divisions (CADMAN, 2010)
- ❖ Ofcom concluded that there were long-standing barriers to competition and investment and that it was necessary to provide communication providers with equality of access to those parts of BT's network that represented a bottleneck (OFCOM, 2002)
- ❖ Legal definition of discrimination in this context is given below:
 - ❖ “....a condition requiring the dominant provider not to discriminate unduly against particular persons, or against a particular description of persons, in relation to matters connected with network access to the relevant network or with the availability of the relevant facilities” (UK LEGISLATION, 2003)
- ❖ Similar flavours of regulation were introduced in other countries like Australia, Italy, Poland, New Zealand and USA (BEREC, 2010)

Market performance post-TSR Regulation

- ❖ Total retail telecom service revenue has increased since TSR has been introduced, as given below (OFCOM, 2012: 29):

Total retail telecoms service revenues increased



Source: IDATE / industry data / Ofcom

Market performance post-TSR Regulation

- ❖ UK has seen the largest fall in incumbent's (British Telecom's) share of fixed voice volumes since EOI and Functional Separation requirements were introduced (OFCOM, 2012: 33):



Source: IDATE / industry data / Ofcom



Challenges Faced by CPs

- ❖ Once the regulatory regime has decided that changes are necessary and has published both its requirements and the timeline by which its requirements need to be implemented, the incumbent CPs need to understand the exact detail behind the regulator's thinking
- ❖ They need to take into consideration their stakeholders' requirements and priorities and discuss on the need to innovate and improve current products, processes and working practices, to ease the customer/asset data migration targets to meet the requirements
- ❖ Roadmap developed should consider the following challenges, organisational readiness for them and strategies to address them
 - ❖ Challenge 1. Product / portfolio rationalisation
 - ❖ Challenge 2. Sorting multiple product combinations for Migration
 - ❖ Challenge 3. System and Data Architecture
 - ❖ Challenge 4. Training Agents
 - ❖ Challenge 5. Launch of New Offerings
 - ❖ Challenge 6. Availability & Quality of Data in New Systems in New Data Format



Challenges Faced by CPs

❖ Challenges Continued:

- ❖ Challenge 7. Running the Migration Engine on track
 - ❖ Challenge 8. New requirements based on regulatory acts and fair competition acts
 - ❖ Challenge 9. New workaround requirements
 - ❖ Challenge 10. New System Issues
 - ❖ Challenge 11. Aligning across multiple organisational divisions in prioritising requirements
 - ❖ Challenge 12. Creation of separate organisational units
 - ❖ Challenge 13. Duct & Equipment Sharing
 - ❖ Challenge 14. Ability to provide tactical solutions
- ❖ Challenges 12, 13 and 14 are out of transformation framework scope, even though they have to be addressed by individual Telco's to meet EOI and functional separation obligations. Due to the peculiar nature of these challenges and the context of this paper in addressing a transformation framework solution, these challenges have not been considered



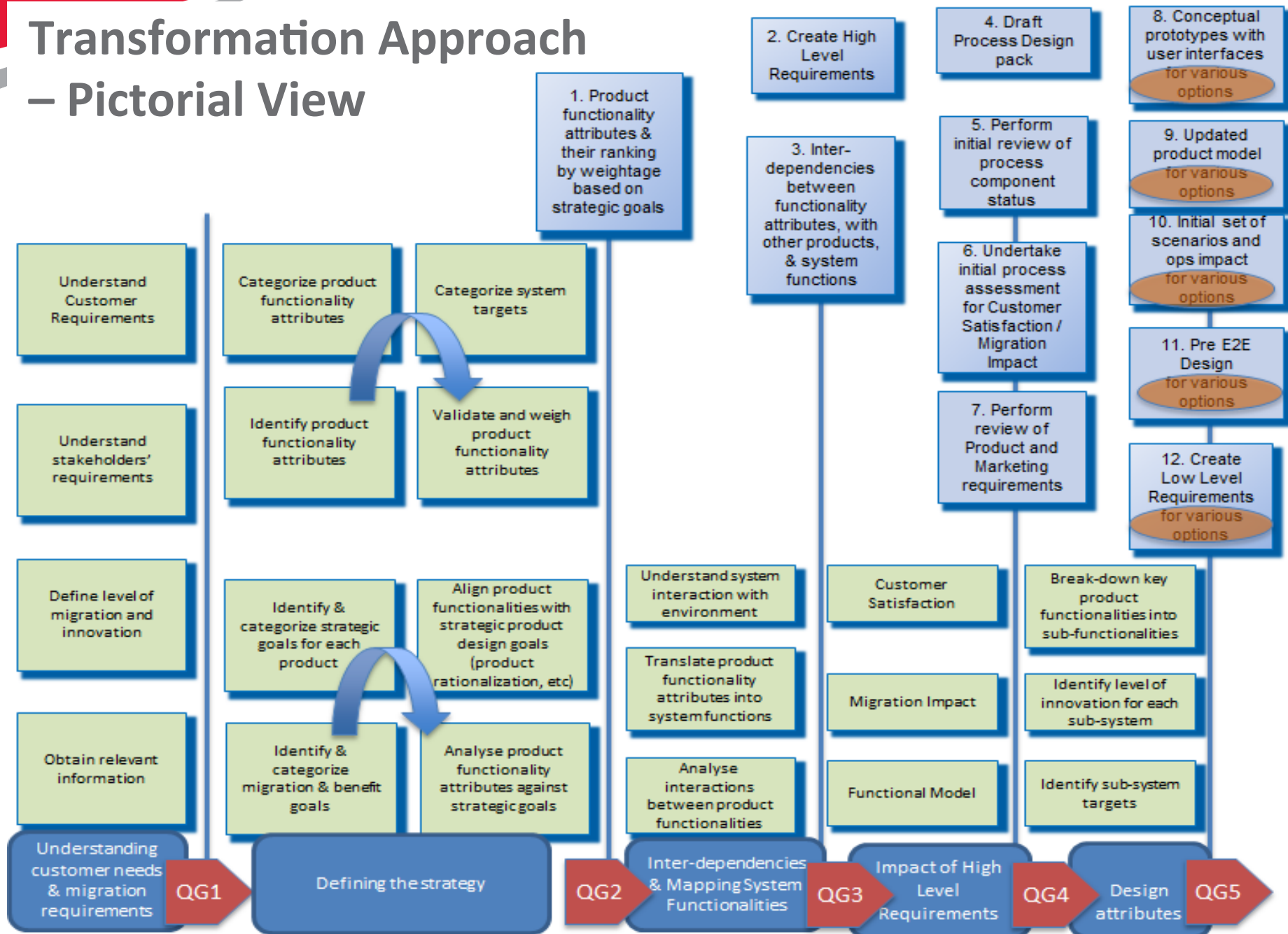
Transformation Approach

❖ Following is a step-by-step approach detailed in this paper to overcome the transformational changes to achieve EOI and Functional Separation:

- ❖ Separation Step 1. Understanding customer needs & migration requirements – What are the expectations?
- ❖ Separation Step 2. Defining the strategy – What should we do?
- ❖ Separation Step 3. Inter-dependencies & Mapping System Functionalities – How is it all linked?
- ❖ Separation Step 4. Impact of the High Level Requirements - How will the solution perform?
- ❖ Separation Step 5. Design Attributes – What are the solution options?
- ❖ Separation Step 6. Feasible options – What is possible now?
- ❖ Separation Step 7. Detailed solution proposals - What needs to be done?
- ❖ Separation Step 8. Release scoping – When it needs to be done?
- ❖ Separation Step 9. Show & Tells – What is due to come?

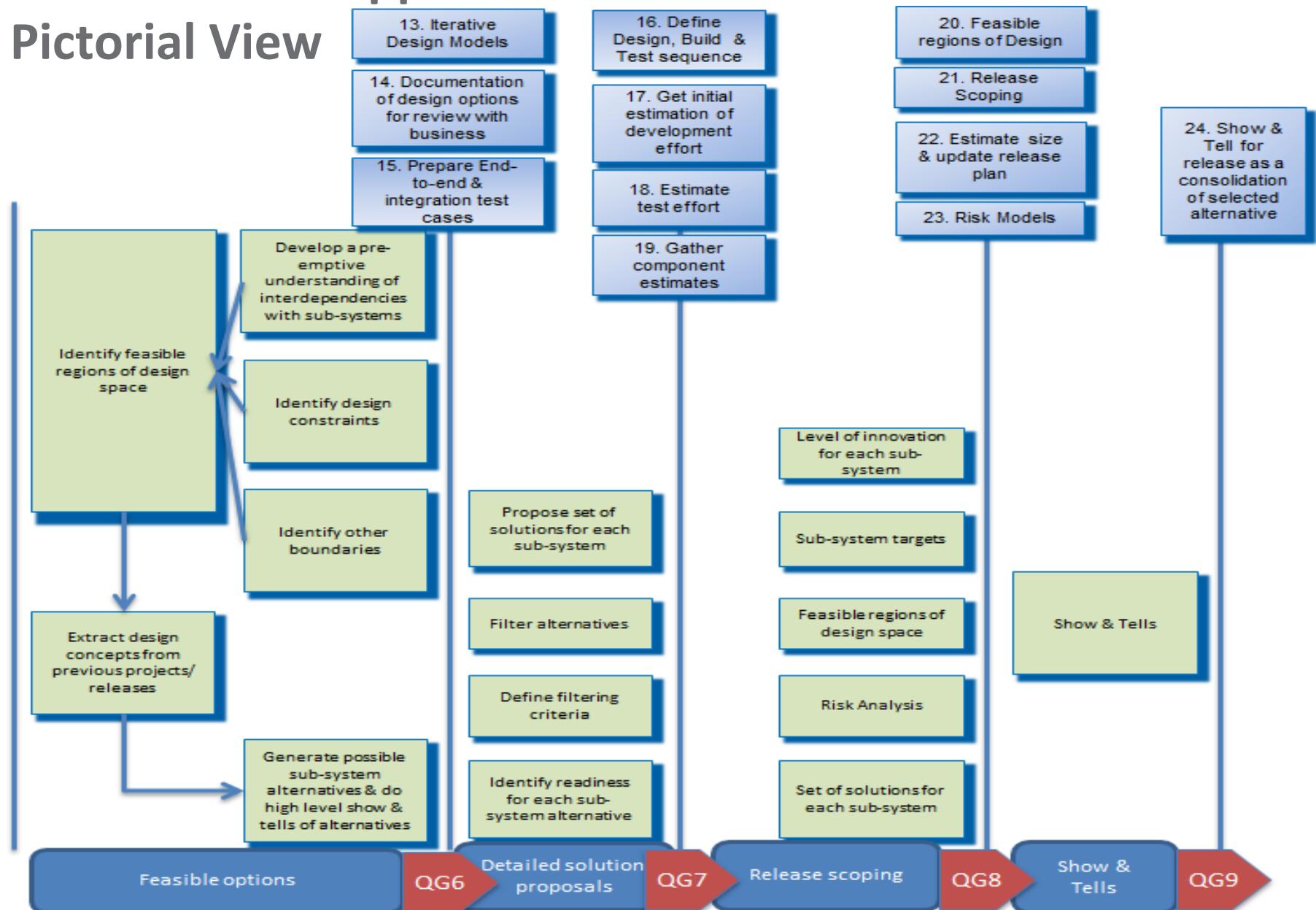
Transformation Approach

– Pictorial View

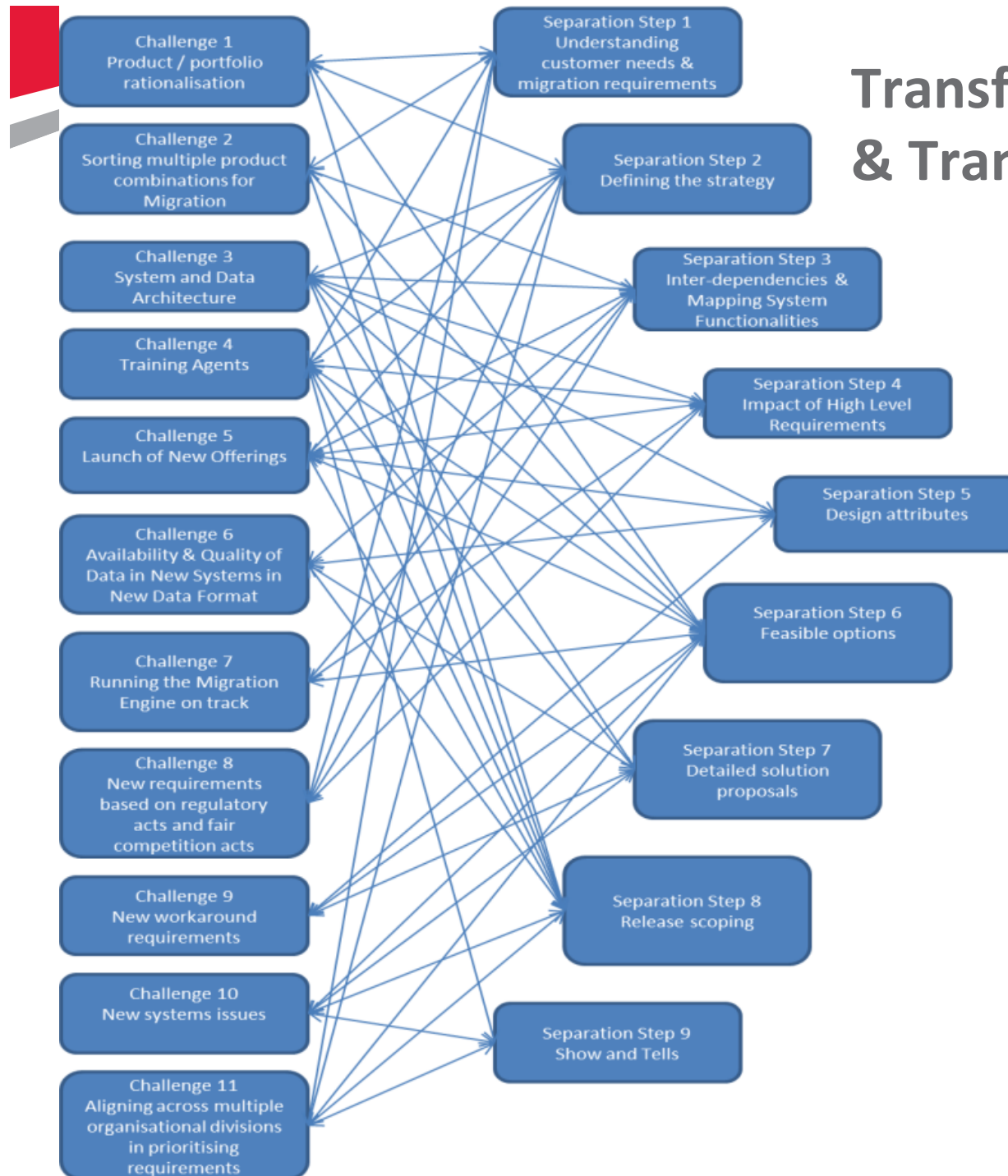


Transformation Approach

– Pictorial View



Transformation Challenges & Transformation Solutions



Conclusion

Functional Separation

- ✓ Functional separation, no matter what country or regime is not straightforward
- ✓ Bottlenecks and the frustrations, mistrust and anger that they cause are there because without a radical change in the organisational hierarchy of a company and its funding, reporting and accountability, it is extremely difficult to implement solutions to bypass them
- ✓ As has been the experience with British Telecom in UK, separation has been complex, difficult and painful, for all concerned
- ✓ Although the EU sees the creation and operation of Openreach as a success there has not been (so far) wide adoption of the paradigm throughout the EU
- ✓ This is not surprising really as each country will have different market conditions, characteristics, laws, regulatory rules and local conditions. There are clearly several functional separation models that can be applied to fit individual needs and circumstances

This Paper's Outcome

- ✓ This paper identified various challenges that a Telco organisation will have in terms of migration, products and service offerings, training, processes and functionalities. The transformation programme framework that this paper has suggested is aimed at providing a set of solution components to address these challenges

Further Work

- ✓ Different functional separation, EOI models and market conditions can be studied to find the best fit between the functional separation and EOI models and the incumbent market conditions
- ✓ Challenges outside the scope of the transformation programme, such as the challenges in setting up a separate organisational entity, can be studied and analysed in detail
- ✓ The impact of EOI and functional separation on investment in access services can be investigated and there is an opportunity to investigate the possibilities and challenges of imposing EOI and functional separation on next-generation networks including optical networks and other high speed networks



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