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# ND1507 2007

## NICC B2B INTERFACE

### FRAMEWORK DOCUMENT

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## Document history

| Revision     | Date                            | Notes  |
|--------------|---------------------------------|--|
| Draft 1a     | 1 <sup>st</sup> September 2006  | First Draft for review by BT team  |
| Draft 1b     | 6 <sup>th</sup> September 2006  | Updated with comments from first review  |
| Draft 1c     | 12 <sup>th</sup> September 2006 | Used NICC document format  |
| Draft 1d     | 18 <sup>th</sup> September 2006 | Added Telecordia to Annex 2  |
| Draft v1.2   | 17 <sup>th</sup> November 2006  | Inclusion of the Scope and Process; Removal of Annex details, replaced with link to document repository; Document placed into revised template |
| Draft v 1.3a | 20 <sup>th</sup> November 2006  | Updated copyright statement in line with comments from November NICC B2B meeting   |
| Draft v 1.3b | 22 <sup>nd</sup> January 2007   | Updated in line with other comments from NICC B2B meeting and meeting with Vice-Chair  |
| Issue 1      | 2 <sup>nd</sup> Feb 2007        | Raised to issue status   |
| Draft V0.2a  | 30 <sup>th</sup> July 2007      | Updated to reflect T2R process framework development   |
| Draft V1.2.1 | 17 <sup>th</sup> September 2007 | Updated version number to conform with NICC versioning method  |
| Draft V1.2.2 | 21 <sup>st</sup> September 2007 | Included new section on document structure and removed links to non-public pages and documents   |
| Issue V2.0.0 | 24 <sup>th</sup> September 2007 | Updated version number & file name to include NICC ND publication number   |

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## 1 Introduction & Purpose

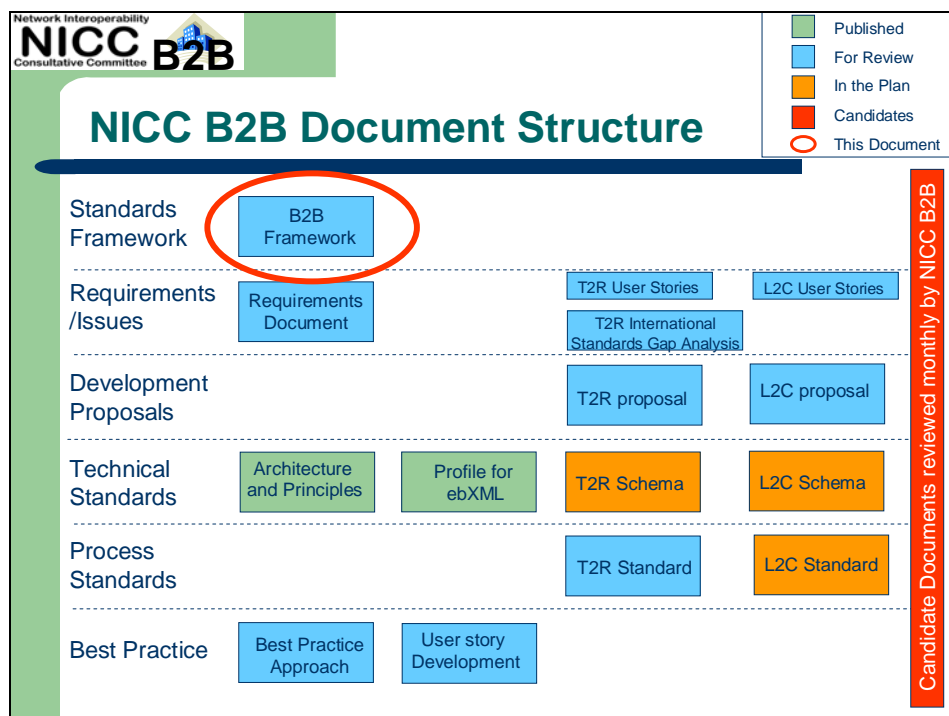
This document provides an introduction and framework for the development of standards and best practice for automated business transactions between UK Communications Providers using Business-to-Business (B2B) interfaces.

The document and associated standards and best practice are initially for communication providers involved in developing the standards. As the standards are agreed it will be increasingly be used by those involved in designing, developing, implementing and running B2B interfaces.

It is a “working” document and further input is always welcome to the NICC B2B Working Group.

## 2 NICC B2B Document Structure & Further Information

This document forms part of a suite of documentation developed and maintained by NICC B2B as shown below. They can be accessed from the NICC publication web site @ <http://www.nicc.org.uk/nicc-public/publication.htm>, and if they are in development from <http://niccb2b.org.uk/>. For access and further details please contact [niccb2b@niccb2b.org.uk](mailto:niccb2b@niccb2b.org.uk).



## 3 Objective

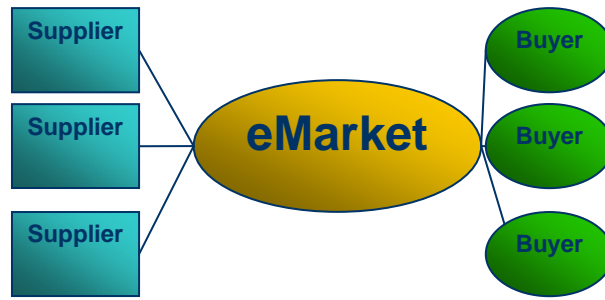
To agree standards and best practice for designing, developing, implementing and running Business-to-Business (B2B) interfaces for automated business transactions between UK Communications Providers. The standards will support the ordering and management of products in the emerging “eMarket” for “multi-service, multi-supplier, triple/quad play services as explained below. The bottom line is to implement quicker, cheaper and better interfaces to the benefit of BT and all CPs”

## 4 Scope

The scope of the NICC B2B is considered around one of four e-market models. These four defined market models are:

**Buyer Managed; Supplier Managed; eMarket Managed; eMarket Aggregator**


The NICC B2B group has adopted an eMarket Managed model as this model best supports an industry wide view of any B2B integration and interfaces for automated business transactions between UK Communications Providers.



The scope is further defined through a high level view of the industry model, the processes that it will support a high level data model and a view of the technical components. Each of these is explained in more detail below.

|   |   |
|---|---|
| <p><b>NICC B2B</b><br/>eMarket Scope for NICC B2B</p> <p>The diagram shows a layered model. At the top are 'CUSTOMER' and 'DEVICE'. Below these are four vertical boxes: 'NETWORK PROVIDER', 'SERVICE PROVIDER', 'CONTENT PROVIDER', and 'VALUE ADDED RESELLER'. Below these is 'PRODUCT' and 'NETWORK'. A red box highlights the 'DEVICE' layer and the four provider/reseller boxes. A vertical label on the left reads 'Processes, Capabilities &amp; Technology Stack'.</p> | <p>Linked to the high level industry model</p> <p>Scope covers most of the industry model</p> <p>Scope is wider than that considered in any of the groups that are currently feeding requirements into the NICC B2B forum</p> <p>The core scope covers:</p> <ul style="list-style-type: none"> <li>• Processes</li> <li>• Capabilities</li> <li>• Technology Stack</li> </ul> |
|---|---|

|   |  |
|---|--|
| <p><b>NICC B2B</b><br/>High Level Process Map</p> <p>The process map shows a flow of activities. On the left, a vertical column includes 'Create Customer', 'Change Customer', 'Planned Works', and 'Cease'. A central 'Monitor Progress' box is connected to several other boxes. The top row includes 'Pre-order', 'Order', and 'Order to Cash Tracking'. Below 'Order' is 'Install Solution', which leads to 'Projects', 'Financial Attribution', and 'Resolve Fault'. Other boxes include 'Site Visit', 'Device Activation', 'Buy on Demand', 'Migrate', and 'Service Port'. A yellow shaded area highlights the 'Order to Cash Tracking' through 'Buy on Demand' sequence.</p> | <p>Process map shows the high level processes that are to be considered as part of the NICC B2B forum activity</p> <p>Separate process definitions are to be produced for each of these processes</p> <p>The links between the process are there to illustrate a view of an end to end process for B2B</p> <p>Any lower level definition of these processes that may be required will be defined within the work for the development of the NICC B2B standards</p> |
|---|--|

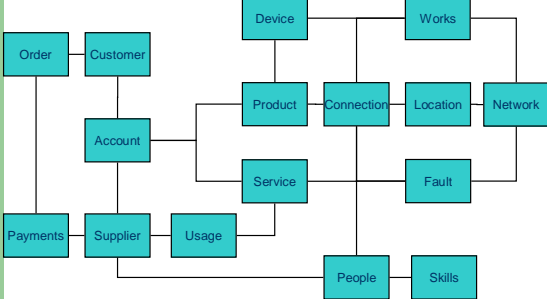



The logical data model shows the main data areas that are expected to be used to support B2B interaction in the high level processes

The links between these data elements show a logical link but should not be considered as a definition of a data structure

Any lower level definition of these data items that may be required will be defined within the work for the development of the NICC B2B standards

### Logical Data Model

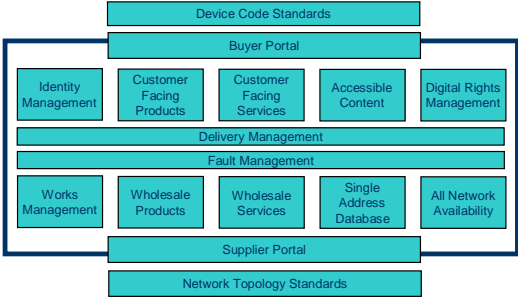




The technical components provide a view of the main components that it is believed will be required to support B2B activity across the industry

All of the components between the two portals will be the main components that will need to exist outside of individual organisations to effectively manage and support B2B interaction into the future

### Technical Components

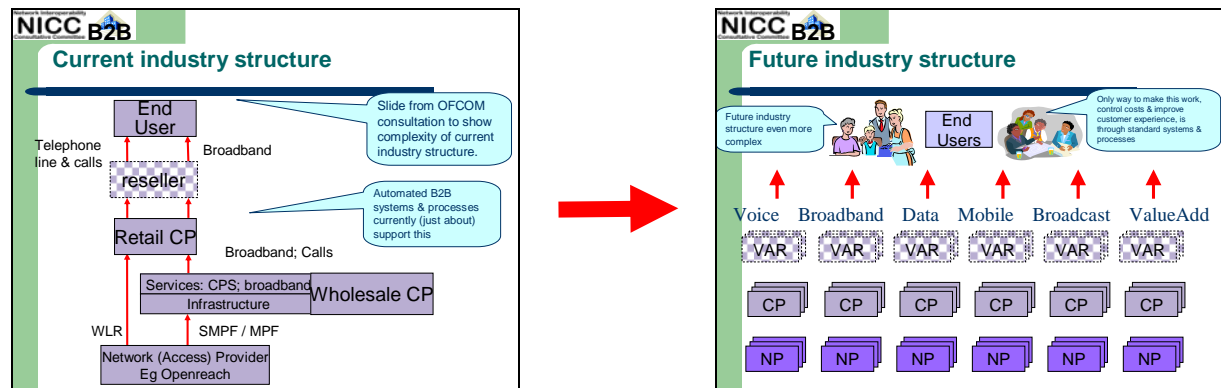


## 5 Background

The need for cheap, reliable, fast and zero touch electronic trading between communication providers is becoming increasingly important as the market for telecommunication and associated services becomes more open and competitive. Development of the market will be hampered in terms of cost and quality of services if we rely on the current combination of diverse manual and electronic trading mechanisms.

As services from different suppliers are bundled and sold through increasingly complex supply chains the need for common B2B standards becomes greater since without them supply chains becomes costly and inflexible. They are needed to ensure the gateways that handle the electronic transactions required to order, bill and manage these services all work together using common processes and information formats.

If we do not establish process, information and technical standards there is a danger that the development of the electronic gateways will be much slower, more expensive and ultimately they may not meet the requirements of the emerging multi-service multi-party industry.



## 6 Why / Benefits

The benefits of standard interfaces, processes and information content include:

- Reducing the number and complexity of interfaces will reduce development and maintenance costs through development and reuse of standard components and capabilities;
- standard components means development times come down reducing time to market for new products and services;
- standard high quality components and capabilities should make them more able to support complex trading relationships and maintain end-to-end services for consumers;
- standard interfaces means more focus and investment on non-functional requirements such as security, resilience and scalability;
- improved and standard interfaces means less things go wrong, costly manual intervention is replaced by zero touch working;
- establishing best practice means better quality services, less reinvention and confusion;
- future proofing and evolution of standards, for example to enable the multi-party multi-service industry that is developing, cannot be achieved on a product by product basis. It needs to be done once in one forum.

## 7 Why NICC

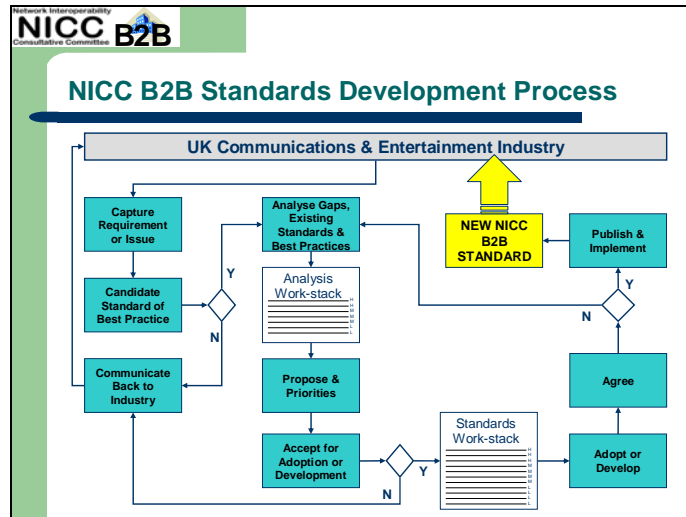
There are already a number of industry forums cover individual products and in Consult21 that generate requirements for interfaces. However, we need a product and company independent forum to establish UK wide standards, and the best forum for that is the NICC.

## 8 How (process)

Once the terms of reference and study item are agreed, the NICC B2B Forum will meet monthly or at appropriate time intervals to review deliverables on the study item list. The NICC B2B forum will also be where new documents and requirements for the study items list will be discussed and any additions to the study items list approved.

To ensure that there is an understanding of the work that needs to be undertaken within the group, and the reviews that take place at the meeting, a review process has been defined (below).

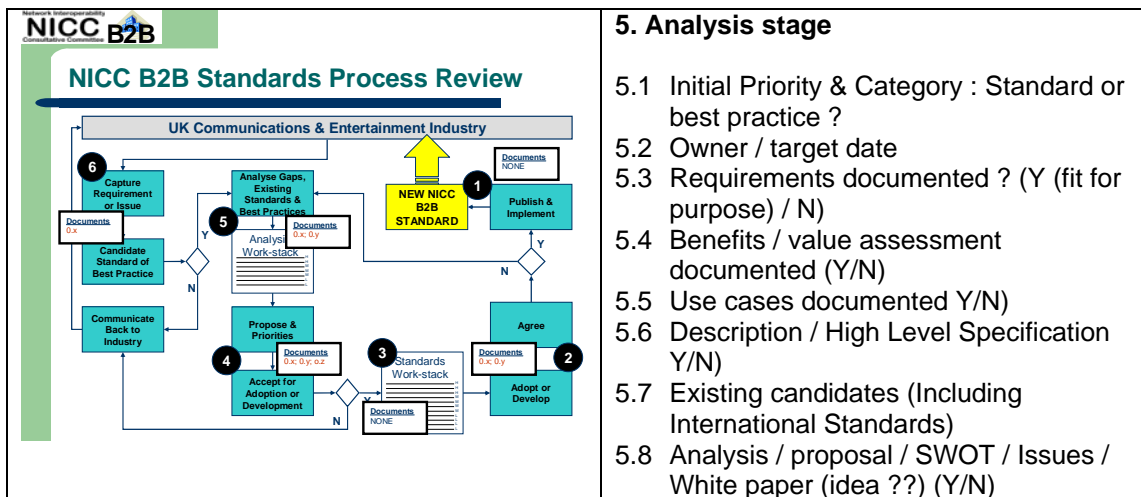




At the NICC B2B forum, the companies taking part will provide drafted versions of the documents upon the study items list that have been worked upon by individuals or groups of individuals from the forum.

To ensure that decisions are made as a priority, the NICC B2B forum will discuss study items in a structured way.

|  |   |
|--|---|
| <p><b>NICC B2B Standards Process Review</b></p> <p>The flowchart shows the development process with numbered steps: 1. Publish &amp; Implement, 2. Agree, 3. Standards Work-stack, 4. Propose &amp; Priorities, 5. Analyse Gaps, Existing Standards &amp; Best Practices, 6. Capture Requirement or Issue. Document types (Documents, Standards Work-stack) are associated with each step.</p> | <p><b>Review Process Stages:</b></p> <ol style="list-style-type: none"> <li>1. Published documents and new NICC B2B standards</li> <li>2. Documents to be agreed to be put forward for publication by the NICC. See Below</li> <li>3. Review of the core work stack that is currently developing standards for NICC B2B</li> <li>4. Documents that propose an adoption of an existing standard or best practice</li> <li>5. Documents to be accepted for analysis and allocated actions as part of the analysis work stack. See below</li> <li>6. New requirements that need to be considered for inclusion as part of the NICC B2B scope of standards</li> </ol> |
| <p><b>NICC B2B Standards Process Review</b></p> <p>The flowchart is identical to the one above, showing the development process with numbered steps 1-6 and associated document types.</p>   | <p><b>2. Development stage</b></p> <ol style="list-style-type: none"> <li>2.1 Proposal documented including priority, ownership, timescales (Y/N)</li> <li>2.2 Any existing candidates ? (Y/N) <ul style="list-style-type: none"> <li>• Are they fit for purpose / adoption Y/N</li> </ul> </li> <li>2.3 Document / update existing candidate / propose adoption / internal review</li> <li>2.4 Review</li> <li>2.5 Adopt / reject ?.</li> </ol> <p><b>Note:</b> Once agreed by NICC B2B the document is submitted to NICC TSG “28 day approval process” for formal approval</p>  |



- 5. Analysis stage**
- 5.1 Initial Priority & Category : Standard or best practice ?
  - 5.2 Owner / target date
  - 5.3 Requirements documented ? (Y (fit for purpose) / N)
  - 5.4 Benefits / value assessment documented (Y/N)
  - 5.5 Use cases documented Y/N)
  - 5.6 Description / High Level Specification Y/N)
  - 5.7 Existing candidates (Including International Standards)
  - 5.8 Analysis / proposal / SWOT / Issues / White paper (idea ??) (Y/N)

Once standards are agreed, companies will develop roadmaps for their implementation including for the establishment of the new gateways and closure of old gateways that will guide their investment and development programmes.

The NICC B2B forum will then meet on a less frequent basis to review progress and any issues or new requirements.

**9 Support required**

Representatives from Communications Providers are asked to:

- participate in the NICC B2B Working Group with appropriate authority;
- work with the other members of the group to develop and agree standards, best practice, governance, etc as defined in the work item
- work within their own companies to implement the standards when developing interfaces and portals.

**10 What & When**

The NICC B2B study item (work plan) lists details of the documents being worked upon, and those being considered, by the NICC B2B forum. It lists details of who is leading the activity for any given document, and key milestones for the progress of the document. It can be found on the NICC B2B document pages together with all the drafted or completed documentation.

The study items list will have a link to the review process added which will enable readers to easily see which stage of the process any individual document is at.

Once a document is agreed it will be loaded on to the main NICC web @ <http://www.nicc.org.uk/>

**11. Priorities & Progress**

The NICC B2B working group meeting regularly to review priorities and progress against the agreed issues and requirements. The Work Plan<sup>(See note 1)</sup> and monthly progress reports give the latest details against the key priorities which are as follows:

**11.1 Progress to date**

0. Set-up

- Re-establish NICC B2B – Sept 06
- Agree work plan<sup>(See note 1)</sup>, ways of working, etc – Sept 06 to Feb 07
- Adopted, reviewed and updated [Consult21 requirements](#)<sup>2</sup>

1. Establish [B2B gateway principles](#) & [technical standards](#) – Jan 07

**11.2 Next steps**

2. Process / workflow – T2R & L2C<sup>3</sup>
3. Sub/component processes<sup>4</sup>
4. Information & Reporting
5. Documentation<sup>5</sup>
6. Architecture
7. Security
8. Testing
9. Portal
10. In-Life

**11.3 Notes:**

1. Work plan includes details of dates, purpose, benefits & comments plus Resource plan for TSG & NGNUK
2. The requirements document provides more detail on the next steps
3. includes use cases / scenarios, process & data model. TSR = Trouble-to-Resolve (faults) & L2C = Lead-to-Cash (orders & bills)
4. address matching/location highest priority with others following when identified by the process work in step 2. Other examples include KCIs, appointing, start/stop clocks
5. including glossary & change control

- End -