
ND1508 2007

TROUBLE TO RESOLVE (T2R)

WHITE PAPER PROPOSAL

Version no: V2.0.0

Network Interoperability Consultative Committee
Ofcom
Riverside House,
2a Southwark Bridge Road,
London SE1 9HA
UK
<http://www.nicc.org.uk>

Normative Information

© 2006 Ofcom copyright NOTICE OF COPYRIGHT AND LIABILITY

Copyright

All right, title and interest in this document are owned by Ofcom and/or the contributors to the document unless otherwise indicated (where copyright be owned or shared with a third party). Such title and interest is protected by United Kingdom copyright laws and international treaty provisions.

The contents of the document are believed to be accurate at the time of publishing, but no representation or warranty is given as to their accuracy, completeness or correctness. You may freely download, copy, store or distribute this document provided it is not modified in any way and it includes this copyright and liability statement.

You may not modify the contents of this document. You may produce a derived copyright work based on this document provided that you clearly indicate that it was created by yourself and that it was derived from this document and provided further that you ensure that any risk of confusion with this document is avoided.

Liability

Whilst every care has been taken in the preparation and publication of this document, NICC, nor any committee acting on behalf of NICC, nor any member of any of those committees, nor the companies they represent, nor any person contributing to the contents of this document (together the “Generators”) accepts liability for any loss, which may arise from reliance on the information contained in this document or any errors or omissions, typographical or otherwise in the contents.

Nothing in this document constitutes advice. Nor does the transmission, downloading or sending of this document create any contractual relationship. In particular no licence is granted under any intellectual property right (including trade and service mark rights) save for the above licence to copy, store and distribute this document and to produce derived copyright works.

The liability and responsibility for implementations based on this document rests with the implementer, and not with any of the Generators. If you implement any of the contents of this document, you agree to indemnify and hold harmless the Generators in any jurisdiction against any claims and legal proceedings alleging that the use of the contents by you or on your behalf infringes any legal right of any of the Generators or any third party.

None of the Generators accepts any liability whatsoever for any direct, indirect or consequential loss or damage arising in any way from any use of or reliance on the contents of this document for any purpose.

If you have any comments concerning the accuracy of the contents of this document, please write to:

The Technical Secretary, Network Interoperability Consultative Committee,
Ofcom,
2a Southwark Bridge Road,
London SE1 9HA.

All third-party trademarks are hereby acknowledged.

Document history

Revision	Date	Notes
Draft 1a	5/2/07	Draft one for Internal BT review
Draft 1b	7/2/07	Included comment on resources constraints into section 5 in response to feedback from the process team.
Draft 1c	26 Feb 2007	Included comments from T2R team
Draft 1d	23 rd March 2007	Included diagram of process
Issue 1	16 th April	Issued as agreed at Meeting 5a
Issue V2.0.0	24 th September 2007	Prepared for NICC publication by updating version number and adding NICC ND reference

Contents

Page

1.	Purpose & Scope	5
2.	NICC B2B Document Structure & Further Information	5
3.	Introduction & Background	5
3.1	Why We Need Standards	6
3.2	Benefits	6
4.	Method	6
4.1	Create or Validate User Stories (US) for T2R	7
4.2	Review User Stories (USs) against NICC B2B requirements templates	7
4.2.1	Functional (F)	7
4.2.2	Non-Functional (NF) requirements	7
4.2.3	Update F & NF in requirements document	8
4.3	Review existing and proposed relevant process standards work & initiatives	8
4.4	Review / Develop Architectures/Models	8
4.5	Agree T2R Process Standard Framework	8
5.	Deliverables	8
7.	Notes	8
Annex 1:	Inputs	10
A1.1	NICC B2B	10
A1.2	Existing standards & Development work	10
A1.3	Work on existing and future CP-to-CP interfaces	10

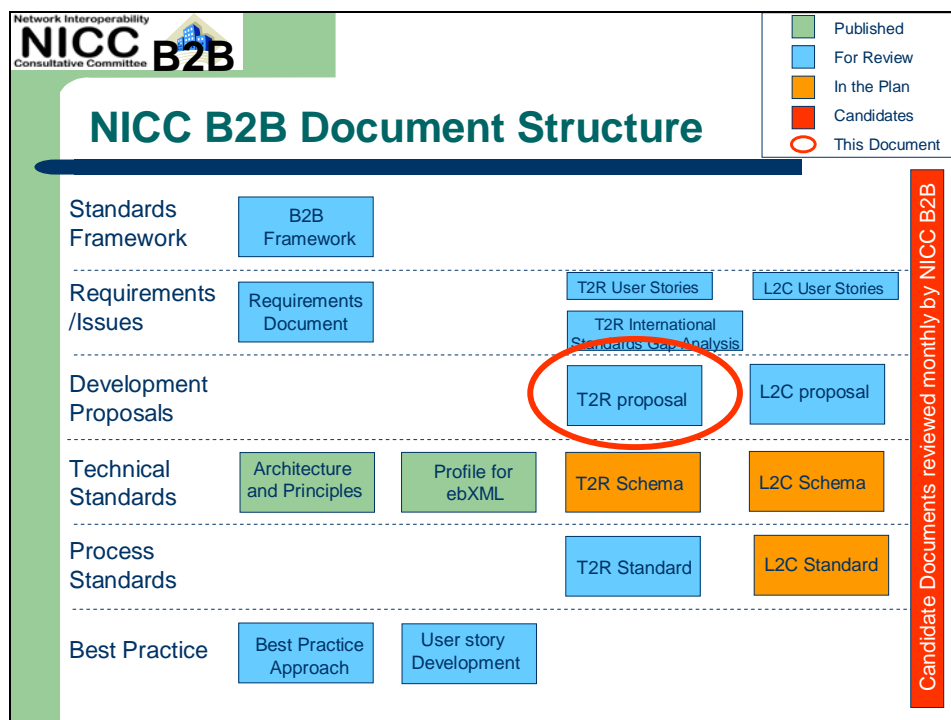
1. Purpose & Scope

This white paper proposes the way forward for developing a standard product independent Trouble-to-Resolve (T2R)¹ process for automated business transactions between UK Communication Providers (CPs) using Business-to-Business (B2B) interfaces.

At its' meeting in January 2007 the NICC B2B Working Group (WG) agreed as the T2R process was its top priority for standards development. This is shortly followed by Lead-To-Cash (L2C)². Once complete this paper will be presented back to NICC B2B WG for agreement and progressing to the next stage.

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.



3. Introduction & Background

These proposals build on the work done to date by the NICC B2B WG since it was re-established in September 2006 to agree two documents covering principles and technical standards for establishing B2B Interfaces. These are already being implemented by CPs using Openreach's B2B gateway and shortly will be by those who plan to use BT Wholesale's new strategic gateway initially being deployed for Broadband Repair and diagnostics.

The next 2 sections on "Why We Need Standards" and "Benefits" are extracted from the NICC. It Systems Interface (B2B) Framework Document as they are applicable here. These sections are followed by the method we are proposing for developing the T2R process standard. For more details on the scope of the NICC B2B WG, how it is managed, plans, meetings, etc please see the B2B Framework Document or the NICC B2B WG website.

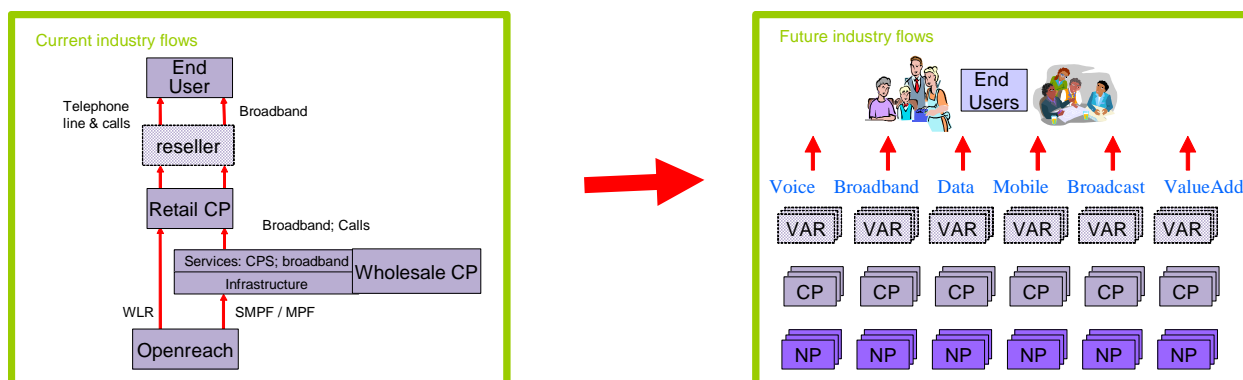
3.1 Why We Need Standards

(extracted from NICC It Systems Interface (B2B) Framework Document)

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.



3.2 Benefits

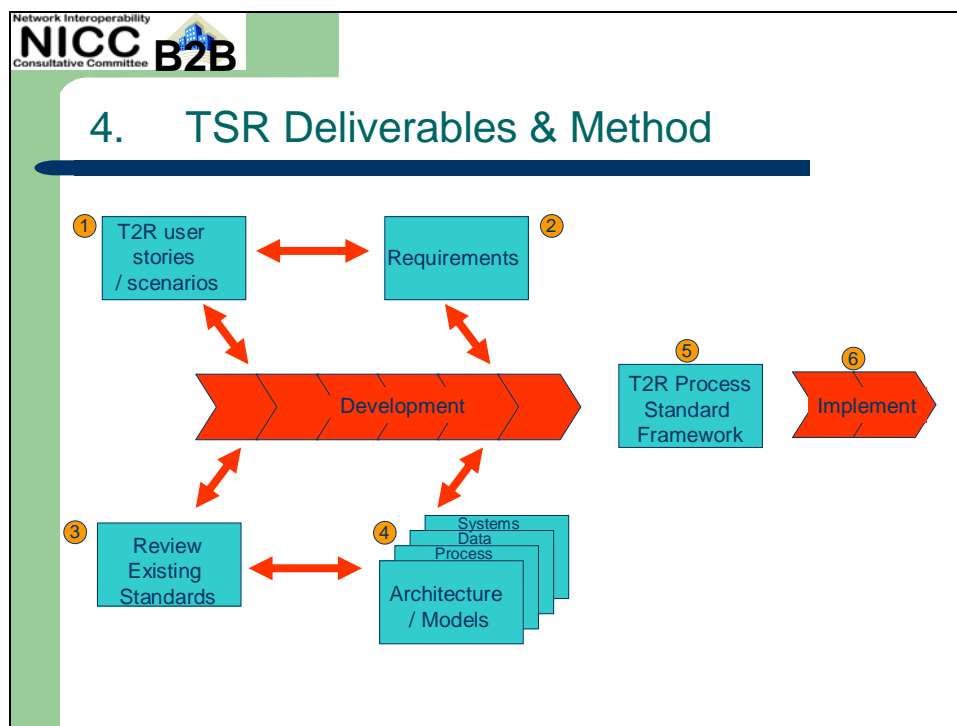
(extracted from NICC It Systems Interface (B2B) Framework Document)

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.

4. Method

The method proposed to develop a T2R process standard is below. It will be content driven, ie by a CP or group of CPs documenting their proposals for agreement with the wider CPs, holding workshops or a combination of both. Where possible and beneficial existing process standards and practice will be reused. This will be agreed by the NICC B2B WG.



4.1 Create or Validate User Stories (US) for T2R

To develop USs we propose to use the method described in the NICC B2B User Story Approach document. This is currently being drafted and will be available from the NICC B2B document pages shortly. To quote the document:

- “The NICC B2B User Stories Approach document contains a description of the approach the NICC B2B proposes for developing business-to-business ‘User Story Scenarios’ or “User Stories” as a means of defining standards for B2B gateways in the UK telecoms industry. It is one a number of techniques designed to facilitate the rapid development of systems, processes and products to meet user and customer requirements.
- User story scenarios are end to end stories that can be easily understood by business people with requirements and systems and process development teams. Existing requirements can be aligned to business scenarios, to identify possible gaps in the requirements, which can then be filled. They enable the work to be divided up into work stream activities that can be taken forward by development teams. The scenarios can be prioritised to give a clear direction to development teams for the order of work.”

4.2 Review User Stories (USs) against NICC B2B requirements templates

4.2.1 Functional (F)

Once complete the user stories will be used to validate and update the functional requirements already captured in the NICC B2B requirements document. Any gaps in the requirements will be filled, overlaps and issues will be eliminated and resolved.

4.2.2 Non-Functional (NF) requirements

As the same exercise will be undertaken for the NF requirements.

4.2.3 Update F & NF in requirements document

Finally the requirements document will be updated for agreement by the CPs represented at the NICC B2B as a complete set of requirements for standards development.

4.3 Review existing and proposed relevant process standards work & initiatives

The NICC constitution and good practice dictates we should take account of and align to any existing process standards work or initiatives. See the draft list of inputs in Annex 1 for more details the current list relevant to T2R.

4.4 Review / Develop Architectures/Models.

The NICC B2B requirements document already contains a **B2B target architecture** and high level **process** and **data models**. The will need to be reviewed, updated and developed further to support the more detailed requirements

4.5 Agree T2R Process Standard Framework

Once we have the user stories, updated the requirements, validated and developed the B2B architecture, process and data models, we can develop and agree the T2R process framework for “automated business transactions between UK Communication Providers (CPs) using Business-to-Business (B2B) interfaces”.

We propose to call this a framework because while it will be as standard and product independent as possible it needs to be flexible to cope with valid variations and new requirements as they emerge.

5. Deliverables

The following deliverables are proposed:

- 4.1 T2R user stories
- 4.2 Updated NICC B2B Requirements
- 4.3 Updated Systems interface architecture and supporting process & data models
- 4.3 T2R Process Standard Framework

6. Timescales & Resources

With the urgent need for automation to cope with a developing and increasingly complex supply chain, we need to work quickly as resources allow. Exact target dates will be agreed by the NICC B2B WG, however it is envisaged the first issue will take 3 to 6 months subject to resource being available from the BT and CP T2R community.

7. Notes

Note 1: Trouble-to- Resolve (T2R)

This process is defined as starting when a customer problem is identified either by the customer or pro-actively by the CP. It ends when that problem has been resolved to the customer's satisfaction.

It includes “assurance”, “ticket/fault management “ in the NICC B2B requirements document and “trouble administration” by the ITU. It is the NICC B2B WG's top priority to progress to the next stage.

Note 2: Lead-to-Cash

This process starts when a customer expresses a need which can be met by an existing CP service, agreeing and delivering what's required, and ends once the customer is billed and CP the receives payment.

It includes "pre-order" or "order" management & "financial attribution" (including billing) in the NICC B2B requirements document. It is second behind T2R in NICC B2B's priorities.

Annex 1: Inputs

A1.1 NICC B2B

- User stories approach
- Framework document
- Requirements
 - Architecture
 - Functional & Non-Functional requirements
 - High level Data and Process models
 - Issues

A1.2 Existing standards & Development work

- NICC B2B
 - Architecture Principles
 - ebXML Profile
- ITU-T Recommendation M.3343
- Other ??

A1.3 Work on existing and future CP-to-CP interfaces

- Openreach
 - WLR & LLU
- BTW
 - Broadband Repair & Diagnostics
 - wBBC
- BT Group process improvement initiatives
- Other CP ?

- End -