Telecommunications and Information Exchange Between Systems

ISO/IEC JTC 1/SC 6

Document Number:	N13921
Date:	2009-04-06
Replaces:	
Document Type:	National Body Contribution
Document Title:	NB of UK's comments on WD 2 of ISO/IEC 29168 OID Resolution System
Document Source:	NB of UK
Project Number:	
Document Status:	For your information.
Action ID:	FYI
Due Date:	
No. of Pages:	5

ISO/IEC JTC1/SC6 Secretariat Ms. Jooran Lee, KSA (on behalf of KATS)

Korea Technology Center #701-7 Yeoksam-dong, Gangnam-gu, Seoul, 135-513, Republic of Korea ;

Telephone: +82 2 6009 4808 ; Facsimile: +82 2 6009 4819 ; Email : jooran@kisi.or.kr

BSI Group headquarters

389 Chiswick High Road London W4 4AL

Tel: +44 (0)20 8996 9000

Fax: +44 (0)20 8996 7400

www.bsigroup.com

Our Ref:

Date: 02 April 2009

Question(s):	Q.12/17	**Meeting, date:**	Interim meeting Tokyo 1-5 June 2009 and SG 17 meeting Geneva September 2009
Study Group:	17 **Working Party:** 3	**Intended type of document** (R-C-TD):	COM 17-C 85 C
Source:	UK (also submitted by UK IST/6 to ISO/IEC SC 6 as a National Body contribution)		
Title:	UK contribution and comments on WD 2 of the OID Resolution System		
Contact:	<Name> John Larmouth <Organization> <Country> UK		Tel: 0161 928 1605 Fax: Email: j.larmouth@btinternet.com
Contact:			Tel: Fax: Email:

Please don't change the structure of this table, just insert the necessary information.

NOTE – The UK will later provide other more technical comments on the ORS WD, largely of an editorial nature.

COM 17-C85 for SG 17 and IST/6 submission to SC 6 on the ASN.1 ORS

1 Introduction

1.1 This contribution seeks to identify a number of issues that will require further consideration in the discussions associated with any technical solution for the OID Resolution System (ORS).In parallel to making this submission, the UK has also responded to TD242 (ITU-T SG17 meeting February 2009) regarding the submission of a letter to ICANN.

1.2 This text is both a COM submitted by the UK Administration for consideration by Q.12/17 at its interim meeting in Tokyo Jun 2009 (jointly with ISO/IEC SC 6) and is also an approved UK National Body contribution to SC 6 WG 9 as comments on WD2 of the ORS, for discussion at the SC 6 WG 9 meeting (jointly with Q.12/17) in Tokyo.

1.3 Use of "UK" (unqualified) below means that this is an agreed position of both the UK Administration and of the UK National Body in SC 6.

2 Concerns related to a gTLD of ".oid"

The UK believes that the use of a gTLD for, or administered by, an international organisation has a number of challenges associated with the costs of obtaining, managing and deploying any such gTLD. These require discussion and understanding of the implications (of decisions taken) upon the membership of the ITU-T. The DNS structure at the top level should remain organisation-independent. The UK cannot support any current attempt to obtain a gTLD of ".oid", without clarification of the funding and management issues. The UK Administration policy in this area has been in place for some time, but the UK Administration has only recently become aware of the ORS proposal.

3 Objections to a DNS-like implementation with a separate root

3.1 The UK is aware that there have been suggestions that the ORS could be implemented with DNS server software and with a DNS-like architecture, but with its own independent root of ".oid". (Sometimes loosely called a "private DNS".)

3.2 The UK would be unlikely to approve any ITU-T Recommendation or ISO/IEC International Standard that made such a proposal. It believes that this would add confusion to the world-wide use of the DNS.

4 Discussion of possible DNS nodes for ".oid"

4.1 The UK notes that the use of ".oid.itu.int" has been considered, and understands the concern not to link ".oid" too strongly to ".itu", as it is joint work with ISO/IEC, and is jointly administered (at least in part). It does not recommend this option.

4.2 The UK also notes that the use of "oid.int" has been considered, and recognises that the rules for allocation under ".int" would preclude this option. The UK suggests that this option should not be discussed further.

4.3 The other option that has been discussed is ".oid.arpa". The UK notes that there is a precedent for infrastructure registration allocations under ".arpa" that has been set by ".e164.arpa" in ITU-T SG 2, and the UK strongly urges that this approach be discussed and issues associated with its implementation resolved in order to rapidly progress the ORS. There may be experts in ITU-T SG 2 that were involved with the establishment of ".e164.arpa" that can give useful advice on procedures, time-scales, and any costs for establishing ".oid.arpa".

4.4 However, if ".oid.arpa" was obtained from ICANN, the UK would wish to see a cost benefit analysis and commercial model in place determining who would run the server containing the zone files for ".oid". The UK considers that these zone files and server should be managed by an independent organisation (as is the case for ".e164.arpa"), not by an international organisation such as the ITU-T. This is for reasons similar to the concerns on the use of a gTLD of ".oid"..

4.5 The UK understands that the National Internet Development Agency of Korea (NIDA) already provides registration support for the OID tree for allocations under the node {2 27}, and would consider an organisation similar to NIDA to be very appropriate for managing and maintaining the zone files for ".oid.arpa", subject to the existence of commercial, management and regulatory policy agreements.

5 Items that need to be considered in the development of the ORS

5.1 Introduction

5.1.1 The UK recognises that the ORS work to-date has largely concentrated on technical and protocol issues, but is concerned that governmental and commercial issues have not been sufficiently addressed.

5.1.2 The UK notes that a decision has been taken not to use X.500 as the base for the ORS work, and does not wish to question that decision at this time.

5.1.3 However, there are other issues that Q.12/17 and SC 6 WG 9 need to address in this Recommendation | International Standard for it to be acceptable to the UK, in order to provide a complete path for its eventual implementation. These are addressed in the following sub-clauses.

5.2 Governance and wider consultation issues

5.2.1 The recent problem with TD 242 (ITU T SG17 Meeting February 2009) and resulting objection letters has arisen largely because there has been insufficient exposure of the ORS work, and insufficient consultation with representatives of Administrations.

5.2.2 This issue affects the governance of the internet, and should have been discussed and agreed at a high level before the letter proposed in TD 242 was drafted.

5.2.3 The UK would urge Q.12/17 at its joint meeting in Geneva in September to schedule and widely publicise a joint meeting to specifically address (and hopefully obtain agreement on) the way forward in this area.

5.3 Commercial issues

5.3.1 Is there a need for a separate Recommendation | International Standard to determine registration mechanisms and procedures, and any associated charging, for inclusion in the DNS structure of nodes lower down the International OID tree, or is this covered by the existing ITU-T X.660 | ISO 9834 series?

5.3.2 The UK believes that at least a clause is needed in Rec. X.oid-res | ISO/IEC 29168 related to commercial aspects of ORS implementation. The following is an initial list of questions. The UK encourages others to input both further questions and answers to the Tokyo meeting, to any correspondence group that is established, and to the proposed wider meeting identified in Section 5.2.3:

- Are there any recommendations to be made on charges that the administrator of the zone files for an International OID tree node should levy on organisations wishing to obtain a child node, or will this be left for a decision by each authority responsible for a node?
- Will look-up access to zone file records be totally free (the UK recommends this)?
- Will there be an annual charge for maintaining pointers to child information for a node, or just an initial charge?
- How will changes of the location of the server containing zone files for child nodes (or the authority responsible for the child node) be handled?

5.3.3 These issues should at least be discussed in the Recommendation | International Standard, even if it is agreed that commercial issues are for an independent decision by each authority responsible for a zone file for a particular node.

5.4 Detailed administration issues

5.4.1 The UK believes that there needs to be a very clear statement (probably with diagrams and tables) of what needs to be done to establish a child node B within the ORS from an existing node A, or to add further Unicode labels to the arc leading to child B.

5.4.2 The text should be related to any pair of a parent node A and a child node B, but additional text will be needed to address the root of the International OID tree (e.g. the DNS node ".oid.arpa").

5.4.3 In essence, the existing node A will maintain zone files on some server (which may or may not independently contain zone files for other parts of the ORS/DNS).

5.4.4 These zone files will support all the look-up requirements of the DNS, using appropriate records (which may need to be defined and registered unless existing records are sufficient). This includes the access information related to multimedia data associated with the node, and perhaps also information (and contact details) about the organisation responsible for the administration of that node.

5.4.5 When a new child node B is authorised by the authority responsible for node A, new zone files will be created for node B. These can be on the same or a different server from that containing the zone files for node A, and the zone files for node A will be updated to reference the zone files for node B.

5.4.6 Similarly, when a new Unicode label is added for the arc from node A to node B, the zone files for node A will be updated.

5.4.7 The establishment of the server containing the zone files for the root ".oid" node and the linkage to that from the zone files held for ".arpa" is addressed under clause 5.5 "An implementation plan". It is expected that the zone files in ".arpa" referencing ".oid", once established, will be static and unlikely to change.

5.4.8 However, as the ORS intends to support crawler operation, there may be some care needed in designing the records to be held in the ".arpa" zone files related to ".oid". This can be addressed later.

5.5 An implementation plan

5.5.1 This needs to recognise the informal and largely unrecorded existing base of OID allocations, some (but not all) of which are recorded in the OID Repository (http://www.oid-info.com).

5.5.2 The UK is aware of discussions on a crawler to enable the OID Repository to be synchronised with the ORS/DNS records, and that the proposed return from an ORS/DNS query should inter alia support such a crawler.

5.5.3 The administration and management of the crawler needs to be discussed in Rec. X.oid-res | ISO/IEC 29168 (and agreed), from a technical, organisational, and a commercial perspective.

5.5.4 A clear timetable needs to be minuted by Q.12/17 | SC 6 WG 9 for establishing the administration (and funding?) of a server to hold ".oid.arpa" zone files, and for obtaining the modifications to the ".arpa" zone files to link to this.

5.6 Top-level arc implementations

5.6.1 Conceptually, all the International OID tree nodes are separately administered, but many of the top-level allocations are either within Recommendations | International Standards in the X.660 | 9834 series, or are determined by joint ITU-T SG 17 and ISO/IEC SC 6 Resolutions.

5.6.2 It is expected that distinct DNS zone files will exist for all nodes in the International OID tree, but that many of the top-level ones will be collocated on a single server.

5.6.3 The administrative mechanisms by which updates of that server are made as new long-arcs or further Unicode labels are added for top arcs (by SG 17 | SC 6 Resolutions) need to be specified.

5.6.4 Many of the top-level arcs and child nodes are automatically generated – for example, there is a node for every Recommendation and for every ISO or IEC Standard in the International OID tree. It is probably unrealistic to expect these nodes to be entered into the ORS/DNS unless or until the Recommendation or Standard makes sub-allocations (and perhaps not even then). This issue needs discussion.

5.6.5 There are also arcs (beneath the node {2}) that identify specific activities and that are allocated from time-to-time. The application procedures for arcs beneath the node {2} may need to be modified to establish whether the applicant will provide an ORS/DNS server for the node or not. (The former should be encouraged.)

5.6.6 It is possible that the ORS/DNS zone-file data for a child of a node A should allow for both a link to a zone-file for that child B and also simply to record that a child B has been registered with the authority for node A, but that there is no on-line information available (no link to a zone file) for the child B. These issues need to be discussed and addressed.

6 Conclusion

6.1 The UK considers that the DNS-related issues need to be resolved in the ORS text as a matter of urgency. Discussions are needed during the interim meeting of Q.12/17) in Tokyo (jointly with ISO/IEC SC 6 WG 9) and in any subsequent correspondence group, for discussion and review at the September ITU-T SG 17 meeting (jointly between Q.12/17 and SC 6 WG 9, with representatives of interested Administrations present), in order to provide a firm base for future ORS work. Q.12/17 jointly with SC 6/WG 9 should schedule and publicise a session for discussion of issues that Administrations may have concerns with. (Essentially, that is anything that is addressed in the above text.)

6.2 The UK believes that use of ".oid.arpa" provides the easiest solution to providing the ORS.