The celebration of the 40th Anniversary of the ISSN network was the highlight of year 2015. The ISSN International Centre coordinated various outreach activities and edited a special issue of the journal Ciência da Informação which was published in August 2015 thanks to the support of the Instituto Brasileiro de Informação em Ciência e Tecnologia (IBICT) in Brasilia. IBICT’s director, Dr. Cecilia Leite, attended the IFLA WLIC 2015 in Cape Town (South Africa) and made a presentation about this special issue, jointly with Gaëlle Béquet, director of the ISSN International Centre.

Another highlight was the accession of the Russian Federation to the Statutes of the ISSN International Centre which was officially endorsed by UNESCO on November 30th, 2015. The related working agreement was signed on December 3rd, 2015 between the ISSN International Centre and ITAR-TASS news agency, the organisation supervising the Russian Book Chamber in Moscow. ISSN Russia started operating in January 2016. At the end of year 2015, 89 countries participated officially in the ISSN network.
1. Activities of the ISSN Network

The 64th Governing Board meeting took place at the ISSN International Centre in April 2015. The 65th and 66th Governing Board distant meetings were scheduled in September and October 2015.

The 40th Directors meeting was organized by the ISSN Serbia in Belgrade (12th - 16th October 2015) with 46 participants from 39 countries attending. The colleagues from the National Library of Serbia (Narodna biblioteka Srbije) were committed to the success of the event which was coordinated by Mrs Tamara Butigan, deputy director of the National Library of Serbia, and Mrs Slobodanka Komnenitch, director of ISSN Serbia.

2. Activities of the ISSN International Centre

2.1. The development of the ISSN International Register

At the end of 2015, the ISSN International Register contained 1,884,990 records. 73,880 new records were added in ISSN Register in 2015. This figure is much higher than in 2014 (61,139). The ISSN Network, including the ISSN International Centre, performed well in 2015 and shall sustain this level of activity in 2016.

33 countries were using Virtua software in 2015, thus updating the ISSN Register on a daily basis.

The number of files received from ISSN national centres and ingested into the Register has grown significantly in 2015 reaching a peak at 171,299 records compiled in 758 files provided by 46 centres.

The identification of digital resources continued to make good progress with 177,631 electronic titles having an ISSN at the end of 2015 (154,745 at the end of 2014).

2.2. Data, Network and Standards Department

2.2.1. ISSN Assignment

The assignment activity of the department continued to be very active, with a total number of 3859 new ISSN assigned. These figures do not include the amendment of existing records.

<table>
<thead>
<tr>
<th>Register records</th>
<th>Work records</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print</td>
<td>Online</td>
<td>Other*</td>
</tr>
<tr>
<td>1 656</td>
<td>1 065</td>
<td>27</td>
</tr>
</tbody>
</table>

* Any other type of media: CD, DVD, USB sticks, etc.
### Table 2: Number of ISSN assigned by countries by the ISSN International Centre (over 100 ISSN / year)

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of new ISSNs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian Federation (until Dec. 2015)</td>
<td>1,492</td>
</tr>
<tr>
<td>International</td>
<td>673</td>
</tr>
<tr>
<td>Ukraine</td>
<td>521</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>322</td>
</tr>
<tr>
<td>Pakistan</td>
<td>301</td>
</tr>
<tr>
<td>South Africa</td>
<td>235</td>
</tr>
<tr>
<td>Taiwan, Province of China</td>
<td>232</td>
</tr>
<tr>
<td>Peru</td>
<td>193</td>
</tr>
<tr>
<td>Austria</td>
<td>139</td>
</tr>
<tr>
<td>Belarus</td>
<td>138</td>
</tr>
</tbody>
</table>

#### 2.2.2. Relationships with publishers

The Data, Network and Standards Department maintained a high level of interaction with publishers, as part of its assignment activity, and as a reference centre for any questions related to identifiers and continuing resources.

A total number of **29,227 emails** were exchanged in 2015 with publishers and various stakeholders in the publishing industry. A typology of the most frequent questions was established:

1. How to apply for an ISSN?
2. How do we get a barcode for our publication?
3. In case of title change, medium change, publisher change, do we need a new ISSN?
4. Is ISSN related to copyright?
5. Do we need an ISSN or an ISBN for our publication?

#### 2.2.3. Relationships with ISSN National Centres

**Bibliographic expertise**

The email address bibquestions@issn.org is extensively used by ISSN National Centres for bibliographic, cataloguing or technical enquiries related to ISSN assignment. A total of 7800 emails were exchanged with the ISSN National centres in 2015.

**Meetings with National centres’ teams**

The ISSN IC’s team had meetings with the staff of various national centres in 2015 either in Paris or locally:

- Gaëlle Béquet and Clément Oury visited the Chinese National Centre during the ISO TC46 Plenary Meeting in Beijing (June 2015);
- A delegation from the Swedish National Centre met the ISSN IC team in Paris on September 3rd, 2015;
- Pierre Godefroy and Clément Oury had a meeting with staff at the Deutsche Nationalbibliothek about the reorganization of the German ISSN workflow (8th-10th December, 2015).
Training sessions for ISSN National Centres

Two training sessions were organized in 2015:

- An online training session for ISSN Centre in Uzbekistan [March 2015]
- An onsite training session for ISSN Centre in Sri Lanka [October 2015] in the framework of the ISSN Award.

In 2015, the ISSN International Centre reviewed its training offer. The latter was indeed mostly intended for National Centres which were launching their assignment activity, or with limited expertise about ISSN assignment. It was less relevant for centres with good bibliographic skills though they may lack knowledge on certain ISSN specificities.

In November 2015, the ISSN International Centre distributed a survey about training needs to which 48 National Centres answered. A report summarizing the main outcomes was distributed to the ISSN Network. This survey validated the ISSN International Centre’s proposals in terms of new training sessions.

It was therefore decided to set up three new types of training sessions:

- Remote webinars on specific ISSN assignment and cataloguing issues,
- Regional training sessions,
- Initial training sessions to be proposed to National Centres which are starting their assignment activity, or with limited expertise about ISSN assignment.

2.2.4. Standardization activities

ISSN Review Group

The ISSN Review Group met twice in 2015:

- A distant meeting was organized on June 18th, 2015,
- A meeting was set up before the Directors’ meeting in Belgrade [October 12th].

The ISSN Review Group has been working on:

- the preparation of the ISSN standard revision,
- the harmonization between ISSN, RDA and German cataloguing rules, at the request of the Deutsche Nationalbibliothek,
- ISSN assignment to digitized resources.

The ISSN Review Group has also decided to better circulate its decisions to the ISSN Network, by sharing the minutes of its meetings on the Network’s listserv and by storing them on the ISSN extranet. It has also decided to regularly issue ISSN Supplementary Guidelines, i.e. additional rules that complement or specify the ISSN Manual where it is not clear enough. These guidelines should also be distributed to the Network and could ultimately be included in the updated versions of the ISSN Manual.

Two guidelines have been issued so far:

- How to define and record the publisher of a blog;
- The main criteria to be checked when assigning ISSN to publisher packages.
ISSN Manual

Thanks to the help provided by the colleagues from the Spanish ISSN Centre and from the Office for Official Publications of the European Communities (OPOCE), the ISSN Manual is now available in Spanish. In 2016, it will be translated into Russian with the help of our colleagues from the ISSN Russian Centre at the Russian Book Chamber.

A new version of the Manual has also been developed which use XHTML as the format of the master Manual (in three languages). This should:

- Fasten the publication process,
- Allow for the distribution of a same document on multiple formats (PDF, EPUB),
- Facilitate the review or translation processes of the Manual.

First experiments have been conclusive and the switch to XHTML was performed in the second quarter of 2016.

Activities in the framework of the International Standard Organisation

Gaëlle Béquet is the chairperson of ISO TC46 and she chaired the Plenary Meeting which took place in Beijing from June 1st to 5th, 2015. The ISSN International Centre is the Registration authority acknowledged by ISO for the management of ISO 3297: 2007 – ISSN.

Some administrative issues have delayed the procedure regarding the revision of ISO 3297. After discussing with ISO TC 46 technical manager at ISO, the ISSN International Centre has decided to follow a two-step approach. The first stage of the revision was a plain editorial change in the standard to remove the paragraph stating that ISSN assignment is free of charge. This was approved via polling in March 2016. The second stage is the systematic revision of the standard. A five-month ballot was launched in April 2016. National ISSN centres located in TC46/SC9 Member countries were duly informed so that they can get in touch with their standardization body regarding the vote.

Clément Oury is the convenor of the working group for the revision of the WARC file format (ISO 28500:2009), the reference format to store and preserve web archive. He has organized several distant meetings of the ISO working group and an in-person meeting was held in Paris at the ISSN International Centre’s offices on 16th – 17th October, 2015. The group has since produced a Draft International Standard (DIS).

Gaëlle Béquet participated in the IFLA General Conference in Cape Town (August 2015) as member of the Standing Committee of the Section « Serials and other continuing resources » and of the Committee on Standards. She gave two presentations about the history of the ISSN standard and the development of the Keepers’ registry, a joint initiative between the ISSN International Centre and EDINA – University of Edinburgh.

Clément Oury was elected as member of the Standing Committee of the Section « Cataloguing ». To ensure consistency between IFLA and ISSN standards and rules, he has also been elected as member and ISSN liaison with the ISBD Review Group and ISSN liaison with the FRBR Review Group.

In 2013-2014, the ISSN International Centre and the Bibliothèque nationale de France developed the PRESSOO model, an ontology intended to capture and represent the underlying semantics of bibliographic information about continuing resources. The model was validated by the FRBR Review Group and submitted to a worldwide review in March-April 2015 whose results were positive. It has thus been decided by IFLA Cataloguing Section to set up a “PRESSOO Review Group” to ensure the maintenance of the PRESSOO standard. Clément Oury has been elected as chair of the Review Group, whose other members are Vincent Boulet (BnF), Gordon Dunsire (chair of RDA Steering Committee), Louise Howlett (BL), Patrick Lebœuf (BnF) and Regina Reynolds (LoC).
RDA

In June 2015, the ISSN International Centre signed an agreement with the RDA Steering Committee (formerly RDA Joint Steering Committee) in order to "support the maintenance and development of functional interoperability between data created using the RDA and ISSN instructions and element sets". Clément Oury represented the ISSN International Centre at the JSC/RDA meeting in Edinburgh (Nov. 2015). He also attended EURIG (European RDA Interest Group) meeting in Bern (April 2015).

UNESCO


2.2.5. The development of ROAD in 2015

ROAD is the Directory of Open Access Scholarly Resources operated by the ISSN International Centre. The first meeting of ROAD’s Steering Committee took place on June 15th, 2015. The Committee’s members made the following recommendations:

- to launch a survey to have a clear vision of ROAD usage and expectations,
- to develop relationships and integrate into the OA community to increase ROAD reputation,
- to establish partnerships with organizations managing directories of serial publications with the perspective of assigning ISSN to these resources,
- to test some deep linking with ROAD partners,
- to add IPP indicator to the data sources.

In December 2015, a formal agreement was signed with DOAJ which now benefits from a preferential access to the ISSN International Register for its own identification activities.

Communication about ROAD has been enhanced via the publication of a leaflet and the participation in several professional events organised by UKSG, the Bibliothèque nationale de France, the University College London, the National Library of Colombia, Latindex. Nathalie Cornic, who is in charge of ROAD at the ISSN International Centre, has attended various events such as ICSTI Annual Members’ Meeting, COASP, organised by the Open Access Scholarly Publishers Association, IATUL organised by the International Association of University Libraries. She has met expert members of the Open Access community.

Two articles were written to promote ROAD, one in Spanish and another one in English for the Colombian blog Esperando el eco.
2.2.6. Publication ethics

The ISSN International Centre participates in the Think. Check. Submit. Campaign to raise awareness about quality OA publishing among scholars. This campaign gets some support from ALPSP, BioMedCentral, DOAJ, INASP, LIBER, OASPA, SPARC, Springer Nature, STM, Ubiquity Press, UKSG.

2.3. Sales, Marketing and Communication Department

The main missions of the Sales Department are to promote ISSN and communicate about ISSN services worldwide and to sell ISSN services tailored to customers’ needs.

2.3.1. Sales

Sales have not suffered from financial constraints which have impacted some customers, mainly located in Europe and North America because ISSN services are reasonably priced. The interest in the ISSN Data File and OAI-PMH continues to grow.

2.3.2. Communication

The 40th anniversary celebration ended in December 2015. Various events were scheduled during this year. They are listed on the ISSN website: http://www.issn.org/the-centre-and-the-network/40th-anniversary-2/. A celebration poster has been specially designed for the 40th anniversary and sent by email to all national centres.

The special issue of the journal Ciência da Informação was published in August 2015 thanks to the support of the Instituto Brasileiro de Informação em Ciência e Tecnologia (IBICT) and is available online at http://revista.ibict.br/ciinf/issue/view/112.

A 40th Anniversary poster was created and sent to all ISSN National Centres.

The anniversary blog is not available online anymore. The blog has been collected by the legal deposit department at the Bibliothèque nationale de France and is preserved in its digital repository.

The conference organized jointly by the Bibliothèque nationale de France and the ISSN International Centre on November 4th, 2015, was a success. All presentations were filmed and are available on BnF’s website.

A presentation of the project to enhance the coverage of ISSN in Ulrich’s database was made by Laurie Kaplan (ProQuest) and Gaëlle Béquet at Charleston Library Conference on November 7th, 2015. A joint press release was published in February 2016.

In 2015, articles and ads were also published in various Russian publications aimed at the library and publishing communities. These ads have had an impact on the ISSN requests emanating from Russia.

The ISSN Newsletter, edited by the Data, Network & Standards department, consists in a press review about the topics relevant to the ISSN community: libraries, publishing industry, standards. As of March, 2016, there were 3100 subscribers (+ 439 compared to 2014).

The Facebook page [https://fr-fr.facebook.com/ISSNInternationalCentre] reached 1297 likes at the end of year 2015. A Twitter feed was launched in 2015 and had more than 200 followers.
2.4. Information Technology Department

2.4.1. Technical support to the ISSN International Centre’s Departments

The ISSN International Centre updated its version of Virtua software (Innovative) which hosts the ISSN Portal. The project was completed in March 2015 as scheduled. A new server was bought to replace the existing hardware. The server is hosted at CINES (Montpellier).

The department has also contributed to ease the processing and loading of incoming batch bibliographic files.

It has also added specific processing channels for new customers and contributed in checking and processing the ISSN reference file for IEEE in the framework of ISSN premium services. An important similar work has been performed on a file received from other publishers.

The department also developed a framework for the management of the ISSN Manual based on an XHTML source file which can output automatically a PDF version, an HTML version (for the website) and an EPUB version (for relevant devices such as e-readers).

Finally a testing experiment was made with the Vufind open source software, in order to obtain results concerning the usability of this kind of discovery tool for ISSN data. The flexibility of this tool may be very useful as a testbed for indexing issues for the prefiguration of the new Portal and also to enhance the quality of the ISSN International Register thanks the powerful search capabilities of the software.

2.4.2. Technical support to national centres

The IT department has been busy with projects regarding national ISSN centres. It has for example designed a cataloguing online tool specifically meant to help colleagues from the new Russian ISSN Centre in Moscow to catalogue directly their ISSN records in Cyrillic. They were encountering various problems with their local system and workflow and finally decided to use Virtua. The first part of the cooperation with the new Russian ISSN Centre was dedicated to the full “cyrillization” of ISSN records.

The department has also processed a retrospective file of some 10,500 records from the Spanish union catalogue so as to integrate them into the ISSN International Register through a semi-automated process.

The BnF seeks to massively assign ISSN to the digitized versions of numerous old press titles and the pre-processing script for the BnF incoming batch files has been updated: the record for this online version is now generated on the fly based on the metadata of the print version (with the appropriate links and codes).

The IT department has also developed a tool allowing ISSN cataloguers to connect to the ISNI database through the relevant API and to retrieve the ISNI records which potentially correspond to the issuing body entries found in a batch file of ISSN records.
3. Cooperation with partners external to the ISSN network

3.1. EDINA: The Keepers’ Registry

EDINA - University of Edinburgh and the ISSN International Centre have been cooperating for two years on a project called Keepers Extra which aims at enhancing the outreach of the service by involving new institutions involved in international cooperation regarding digital preservation. Newcomers are Public Knowledge Project – PKP (Simon Fraser University, Canada) and Red Cariniana (IBICT, Brazil). In 2015, EDINA and the ISSN International Centre signed a new agreement related to the use of ISSN data to provide the Keepers’ registry service. The institutions involved in this project met in September 2015 in Edinburgh to discuss its further developments. Further meetings will be held in 2016.

3.2. ABES: implementation of CIDEMIS

As announced during the Directors’ meeting in Istanbul (September 2014), the ABES (French Bibliographic Agency for Higher Education) has set up a new system, CIDEMIS, to dematerialize the workflow of ISSN assignment and correction requests sent by ABES to ISSN national centres. This system was developed with the support of the ISSN International Centre and the BnF.

CIDEMIS is intended to improve the rapidity and the efficiency of the whole process, and to help national centres answering ABES requests by quickly providing the relevant information. It also allows for a better monitoring of the assignment and correction activities.

Guidelines to use CIDEMIS were drafted by the ISSN International Centre, with ABES support, in English, French and Spanish. They are available on the extranet.

3.3. ProQuest: enhancement of Ulrich’s ISSN coverage

A joint project with ProQuest started in 2015 with some 200 titles published in the Netherlands, and identified by Ulrich’s but deprived of any ISSN. ISSN Netherlands has checked these titles and assigned ISSN accordingly. ISSN Netherlands will carry on the work by assigning ISSN to 900 titles altogether.

The objective is now to extend this project to Germany, Ireland, Sweden and the UK.

3.4. Latindex

Latindex and the ISSN International Centre signed a Memorandum of Understanding in September 2015. The purpose of this three-year agreement is to promote both parties and exchange metadata about serials. Latindex centres will benefit from specific accesses to the ISSN database while the ISSN International Centre will use Latindex records to enhance ROAD. Another objective is to assign identifiers to serial resources indexed by Latindex but not covered by the ISSN International Register.
4. ISSN Award

The “ISSN Award” was created in 2007 by the ISSN Governing board in order “to support and encourage ISSN Members to participate in ISSN training sessions and meetings.” The purpose of the award is to recognize special efforts made by a country in the ISSN field, and to provide an incentive to improve the coverage of the ISSN International Register.

The 2015 award was granted to the ISSN Centres in India and Sri Lanka. Dr. Gopalakrisnan Nair Mahesh, head of the National Science Library (NISCAIR) in India, attended the Directors’ meeting in Belgrade (Serbia) in October 2015. Mrs Senani Bandara, deputy director of the National Library and Documentation Services Board in Sri Lanka, attended a training session in Paris in October 2015. Each past ISSN awardee received an official ISSN Award document at a special ceremony during the 40th Directors’ meeting in Belgrade (Serbia).

5. Conclusion

2015 was a commemorative year for the ISSN network which celebrated its 40th Anniversary.

2016 is a challenging year as critical changes are looming ahead. With the support of the Governors and the ISSN Directors, the ISSN International Centre will define its new strategy to carry out necessary reforms, both at financial and organisational levels, which will get the ISSN International Centre involved in the web of data and enhance ISSN outreach.