





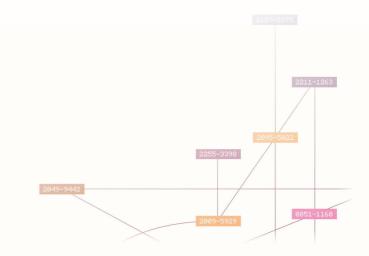


The highlight of year 2016 was the approval of the new strategic plan of the ISSN International Centre by its governing bodies, e.g. the Governing Board and the General Assembly of Member countries. Thanks to these positive decisions, the ISSN International Centre officially launched in November 2016 the project aiming at implementing better tools to interact with publishers requesting ISSN and with customers paying a subscription to ISSN services. The ISSN portal will be upgraded to be fully web compliant and to offer linked data services.

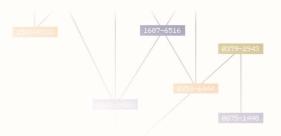
In 2016, a ballot about the minor revision of ISO 3297 standard (ISSN) was launched by TC46/SC9 secretariat and the outcome of the vote was positive. And so was the vote about the systematic review of ISO 3297 which was balloted in September 2016. The revision of ISO 3297 will start in 2017.

Further to its involvement with the celebration of the 40th Anniversary of the ISSN International Centre and its network, the Instituto Brasileiro de Informação em Ciência e Tecnologia (IBICT) organized the annual ISSN Directors' Meeting in Brasilia in November 2016. This was the second ISSN Directors' meeting ever to take place in South America since the creation of the ISSN Network. Prior to this meeting, IBICT also held a one-day ISSN workshop for Latin American and Caribbean countries with participants from Argentina, Brazil, Colombia, Cuba, Panama and Peru.

Last but not least, the Russian ISSN National Centre started operating in January 2016. Our Russian colleagues from the Russian Book Chamber, a department of ITAR-TASS news agency, are ISSN enthusiasts and they have notably contributed to the translation of the ISSN Manual into Russian.







1.The ISSN Network

1.1 Coverage and extension of the ISSN Network

In 2016, the ISSN Network did not expand with 89 countries participating in the ISSN Network. Discussions about their official accession took place with representatives from Cuba, Panama and Peru during the ISSN Directors' meeting in Brasilia. There were further discussions with Belarus, Kazakhstan and Ukraine.

Although the review and update of all working agreements between the ISSN International Centre and the organisations hosting ISSN National Centres was planned in 2016, the process has proved to be lengthier as some legal advice was sought for to check IPR issues.

Activities of the ISSN Network

Ten representatives of member countries sit at the Governing Board beside the representatives for France and UNESCO. Four meetings of the Governing Board were organised in 2016. The 67th meeting (distant) was held on 22 January 2016. The 68th meeting was held in Paris on 26-27 April 2016. The 69th meeting was also held in Paris on 29 April 2016. The 70th meeting (distant) was summoned on 17 October 2016.

The 21st General Assembly of ISSN Member Countries was organized in Paris on 28 and 29 April 2016. On the first day, an international conference about linked data was organised by the ISSN International Centre under the aegis of UNESCO. On the second day, the General Assembly dealt with the current activities of the ISSN network. This conference was a great success and had a good attendance. A few presentations were recorded and posted on ISSN International Centre's YouTube channel. The results of the survey which was conducted shortly after the event showed that participants were happy with the venue and the conference programme. Respondents also supported the organisation of a conference in April 2018, prior to the next meeting of the General Assembly.

The 41st Directors' meeting was kindly hosted by ISSN Brazil in Brasilia from 7 to 11 October 2016. Attendance was lower than expected with 11 delegates being present and 7 attending online. The ISSN International Centre was represented by its director, two heads of department and its executive secretary.

1.2 Progress made on strategic objectives

The first goal of the ISSN International Centre is to **improve the operations of the ISSN Network** by supporting existing ISSN National Centers through communication, advising and training. The latest version of the ISSN Manual was published in 2015. It was translated into Spanish and Russian in 2016 and it will be published on the ISSN International Centre's website in xhtml version. Webinars in English and Spanish were also organized in 2016.

The cooperation with ISSN National Centers in South America will be strengthened in 2017 thanks to the creation of a Latin American ISSN Group further to the proposal made by ISSN Brazil. The ISSN Directors' Meeting will take place in Morocco in 2017 and the ISSN International Centre will support participation from representatives of African ISSN National Centers.

The ISSN International Centre has been continuously advocating the importance of ISSN standard and system at various professional events. During the annual Conference of the Directors of National Libraries (CDNL) in Columbus (U.S.A.), Ms. Gaëlle Béquet, Director of the ISSN International Centre, was invited to speak about the new strategy of the ISSN International Centre.



Shortly after Mr. Frank La Rue was appointed as Assistant Director-General for Communication and Information at UNESCO, a meeting between Mr. LaRue and Ms. Gaëlle Béquet took place in July 2016. Mr. LaRue suggested they jointly sign a letter to National Commissions for UNESCO to inform them about the activities and the projects of the ISSN International Centre. This letter was eventually circulated to the National Commission for UNESCO on 16 March 2017.

Another goal of the ISSN International Centre is to **enhance its data, products and services** and consequently to better promote the ISSN brand. Quality of ISSN data is a key element to increase future usage on the new portal and the corporate extranet, attract new customers who will subscribe to the Premium version and set up partnerships with database vendors, aggregators and other information providers.

The adherence to international standards and the steady contribution to the development of these standards are crucial for the ISSN International Centre and the ISSN network which are recognized as centers of expertise for the identification and description of serials and continuing resources. The ISSN International Centre strives to keep abreast with the changes occurring in the publishing industry and with the evolution of cataloguing practices in libraries. This is the reason why the revision of the ISSN standard within the ISOTC46/SC9/WG5, a working group comprising more than 20 experts from ISSN National Centers, academic and research bodies and the publishing industry, is so important. This forum will allow the ISSN International Centre to discuss the new features which can be included in the standard to better serve our constituencies.

The third goal of our strategy is to **enhance the ISSN International Centre's IT infrastructure** including office and business hardware and software facilities. Teleconferencing facilities have thus been upgraded to support our webinars. In 2016, the ISSN International Centre encountered some problems when its IT contractor failed to restore files from the backup. The problem was finally sorted out but this mishap encouraged the IT Department to look for another company for the maintenance of our IT infrastructure.

Setting up new Partnerships is the fourth goal mentioned in the ISSN International Centre's strategy. In 2016, a new workflow for automated ISSN assignment to pre-publications was tested with Springer and the ISSN National Centre in Germany. Projects for semi-automatic ISSN assignments were also conducted with the ISSN National Centres in France and in Spain. The cooperation with EDINA - University of Edinburgh has involved enhanced data exchange, participation in joint presentations and some planning about the future of the Keepers' Registry (https://thekeepers.org).

Improving ISSN International Centre's governance and awareness is the fifth item in the ISSN International Centre's strategy. The Governors are regularly informed about the activities of the ISSN International Centre via intermediate reports. The development of monitoring tools such as management indicators should definitely start in 2017. In 2016, the revision of the Staff statutes and their adoption by the Governing Board clarified the rights and obligations of the staff and the management. To ensure transparency, these statutes have been published online in French and English versions. Enhancing corporate communication to raise the ISSN International Centre's profile is another key objective. The annual report has a new layout and is published online every year. The corporate website is now available in Spanish. An international marketing campaign shall be launched in 2017 to promote the new tools developed by the ISSN International Centre.

Our most substantive goal is **to share ISSN data with a wider community** while reconciling Open Access and Linked Data principles with financial revenues drawn from products and services. This crucial goal includes several distinct objectives which were approved during the 68th Governing Board meeting and the 21st General Assembly meeting which took place in April 2016. Our governing bodies decided to have the ISSN International Centre expose part of ISSN data as linked open data, implement a Customer Relationship Management tool and a new ISSN portal and develop packages of enhanced services using ISSN data.





The ISSN International Center has been working on its new CRM tool and its new portal since June 2016. The call for tender was launched in September 2016. The ISSN International Center contracted in November 2016 with Progilone, a French IT company based in Lyons. This project should be completed by the end of 2017.

2. Activities of the ISSN International Centre

2.1. The development of the ISSN International Register

At the end of 2016, the ISSN International Register contained 1,943,572 records.

58,696 new records were added in the ISSN Register in 2016. This figure is lower than last year (73,880) but it is more in line with the figures recorded in the previous years (respectively 61,696 and 61,139 in 2013 and 2014).

Identification of digital resources continued to grow. 23,867 online resources were identified in 2016 representing more than 40% of the total ISSN assigned in 2016. As of January 2017, there were 201,663 online resources recorded in the ISSN Register, accounting for more than 10% of the total number of records.

35 countries were using Virtua client, thus updating the ISSN Register on a daily basis.

The number of files sent by ISSN National Centres and ingested into the ISSN Register increased dramatically in 2016: 870 files were provided by 46 ISSN National Centres with a total of 170,482 records. These files were loaded on a daily basis into the ISSN Register. Two ISSN National Centres implemented OAI-PMH delivery of data: ISSN Germany at the Deutsche Nationalbibliothek and ISSN Norway at the Nasjonalbiblioteket.

2.2. Data, Network and Standards (DNS) Department

2.2.1. ISSN Assignment

The assignment activity of the DNS Department continued to be very high, with a total number of 4,036 new ISSN assigned versus 3,859 in 2015.

Table 1: Number of ISSN assigned by the ISSN International Centre (status and medium)

Definitive records			Provisional records			Total
Print	Online	Other*	Print	Online	Other*	
2111	1306	35	433	143	8	4 036

* Any other type of media: CD, DVD, etc...



Table 2: Number of ISSN assigned in 2016 by the ISSN International Centre (broken down by country				
receiving over 100 ISSN / year and including both definitive and provisional records)				

Country	Number of new ISSNs
Ukraine	715
International	623
Hong Kong	312
Pakistan	303
Peru	224
South Africa	222
Taiwan, Province of China	218
Bangladesh	125
Austria	114
United Arab Emirates	101

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.

In 2016, the ISSN International Centre, the German ISSN National Centre and Springer Nature worked together in order to set up a new ISSN assignment workflow whose goal was to automate the assignment of ISSN to pre-publications based on metadata produced by Springer Nature. The publisher gets the ISSN more quickly and the metadata related to pre-publications are included swiftly in the ISSN Register. The new workflow has been operating since 1 January 2017.

The ISSN International Centre would like to extend this workflow to other multinational publishers requesting ISSN.

2.2.3. Relationships with National Centres

Provision of bibliographic expertise

The email address bibquestions@issn.org was still extensively used by ISSN National Centres for bibliographic, cataloguing or technical questions related to ISSN assignment.

A total of **3,700 emails** were exchanged between the ISSN International Centre and ISSN National Centres in 2016.

Meetings with ISSN National Centres' representatives

The ISSN International Centre's team held a few meetings with the staff of ISSN National Centres in 2016:

-Ms Gaëlle Béquet and Mr Clément Oury visited ISSN New Zealand hosted by the National Library of New Zealand during ISO TC46 Plenary Meeting in Wellington (May 2016).

-Mr Clément Oury held a meeting with the team of ISSN Australia at the National Library of Australia in Canberra (May 2016).

-Mr Mikael Wetterström visited colleagues of ISSN Latvia hosted by the Latvijas Nacionālā Bibliotēka in Riga during the annual meeting of the European RDA Interest Group (May 2016).



-Mr Clément Oury presented the issues regarding the revision of the ISSN standard to colleagues of the Deutsche Nationalbibliothek (October 2016).

<u>Trainings</u>

In the perspective of the creation of the Russian ISSN National Centre, it was necessary to put our Russian colleagues in capacity to assign ISSN and use Virtua. A complete training session was provided by the ISSN International Centre to Russian colleagues from 14 to 18 December 2015. This session was completed by an online session in February 2016, and further support via e-mail to accompany the colleagues during the first three months of operations of the Russian ISSN Centre. Another session was provided in Fall 2016 to explain the CIDEMIS workflow. The documentation was translated into Russian by the ISSN International Centre.

Two webinars were organized in 2016 about the Fundamentals of ISSN assignment: scope and titles.

- One in Spanish, in March 2016, attended by five ISSN National Centres: Brazil, Colombia, Costa Rica, Argentina, Uruguay;

- One in English in April 2016, attended by eight ISSN National Centres: Ireland, Luxembourg, Germany, Sweden, Estonia, Slovenia, Croatia and Serbia.

2.2.4. Standardization activities

ISSN Review Group (ISSN RG)

The ISSN Review Group met three times in 2016. A a distant meeting was organized on 23 February 2016. A face-to-face meeting was set up prior to the 21st General Assembly meeting in Paris and a second meeting took place prior to the Directors' Meeting in Brasilia.

Among various issues, the ISSN Review Group has notably been working on the harmonization between ISBD, RDA and the ISSN Manual, the harmonization between the earliest entry and current entry rules and the update of the MARC21 ISSN profile.

In 2016, the ISSN RG discussed and issued an official comment to the draft FRBR-Library Reference Model (now IFLA-LRM). The IFLA-LRM is the high-level conceptual model in the library world. The various existing cataloguing rules (notably ISBD, RDA and ISSN) should be consistent with that model. These comments were taken into account in the subsequent release of the IFLA-LRM recently endorsed by IFLA.

ISSN Manual

The ISSN Manual is available in English, French and Spanish. In 2016, it was translated into Russian with the help of our colleagues from the ISSN Russian National Centre at the Russian Book Chamber. The final Russian version of the Manual will be available on the ISSN Website in 2017 and it will support best practices among Russian speaking ISSN National Centres.

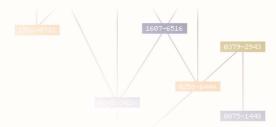
Quality Plan for ISSN Data

This project was launched in 2016 and it aims to deliver a pragmatic definition of "quality", i.e. a definition that is related to the objectives, the context and the resources of the ISSN International Centre and the ISSN Network.

Two workshops were organized in September 2016 and January 2017. Three areas of quality have been defined so far: quality of ISSN bibliographic data; quality of coverage in the ISSN Register; quality of ISSN processes. These areas have their own quality criteria and indicators. A model document for reporting on quality projects has also been designed.

The first project launched in this framework was related to the coverage of the ISSN Register: the emphasis was set on the recovery of unreported records assigned by ISSN National Centres: As a result, more than 4 000 previously unreported records were ingested in the ISSN Register.





The new workflow for ISSN assignment to Springer Nature's publications is part of this quality plan as well as the integration of ISNI into ISSN records. The ISNI (ISO 27729:2012) is the International Standard Name Identifier, i.e. an identifier for public parties (either individuals or organizations). In library catalogues, ISNI are generally assigned to authors of resources and to issuing bodies.

ISSN records may therefore contain ISNI in the "issuing body" fields, i.e. fields 710 and 720 according to MARC21 format. Some ISSN National Centres have already started to send records containing ISNI for ingestion into the ISSN Register. On the other hand, the ISSN International Centre is a member of the ISNI International Agency. Therefore, it is able to retrieve ISNI from the ISNI database or to request ISNI assignment to issuing bodies which are not yet referenced in ISNI database.

In order to check the relevance and the modalities of the assignment of ISNI to resources under the direct responsibility of the ISSN International Centre, a first experiment was performed in 2016 on the records of South African publications. Through a semi-automated process using the API of the ISNI database, the ISSN International Centre identified issuing bodies which were already associated to an ISNI. In that case, the ISNI was added to the ISSN record.

Activities in the framework of the International Standard Organisation (ISO)

The ISSN International Centre is the Registration authority for ISO 3297 – ISSN acknowledged by ISO. Ms Gaëlle Béquet chaired the ISO TC46 Plenary meeting in Wellington (9-13 May 2016). There were discussions regarding identifiers under the umbrella of TC46/SC9.

In 2016, there were three ballots regarding ISO 3297. The committee internal ballot (CIB) about the minor revision had a positive outcome. The two ballots regarding the systematic review of the ISSN standard were also positive. Two more ballots will be organised in 2017, one to confirm the minor revision and remove the paragraph regarding fees from the current version of the ISO 3297, and another one to confirm the details of the systematic review (scope, duration, project leader).

Mr Clément Oury, head of the DNS Department, was 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. The working group produced a Draft International Standard (DIS) which was distributed for ballot on 22 September 2016. As the results of the ballot were 100% positive, the revised WARC standard should be published as an official ISO standard in 2017.

Representatives from the ISSN Network participate in the working group on the revision of ISO 8 -Presentation of periodicals. This standard states the way identification elements are displayed on a periodical (e.g. title, ISSN, enumeration...). It has not been revised since 1977 and should better take into account digital publications. Some elements from PIE-J (Presentation and Identification of Electronic Journals), a recommended practice issued by NISO, will be included in the revised standard.

Activities in the framework of the International Federation of Library Associations (IFLA)

The Director of the ISSN International Centre participated in the IFLA General Conference in Columbus, Ohio (August 2016) as a member of the Standing Committee of the Section « Serials and other continuing resources ». She gave a presentation about Questionable Practices in Scholarly Publishing1 and presented the strategy of the ISSN International Centre at CDNL meeting2. Mr C.

¹ See <u>http://library.ifla.org/1462/1/114-bequet-en.pdf</u>

² See

http://www.cdnl.info/images/PDFs/CDNL_2016/presentations/BEQUET_CDNL_Presentation_August_2016_SC_FIN AL.pdf





Oury gave three presentations during the 2016 IFLA General Conference in Columbus (Ohio, USA) about the projects and achievements of the ISSN International Centre3, the topic RDA and serials4 and the revision of the ISSN standard5.

Mr C. Oury is a member of the Standing Committee of the Cataloguing section. He is also the chair of the PRESS00 Review Group which is dedicated to the maintenance and reviewing of the PRESS00 conceptual model. This model was endorsed in May 2017 by IFLA, thus achieving a worldwide recognition and promoting its adoption and use by stakeholders in the library and information domains.

RDA

In June 2015, the ISSN International Centre signed an agreement with the RDA Steering Committee (formerly RDA Joint Steering Committee) to "support the maintenance and development of functional interoperability between data created using the RDA and ISSN instructions and element sets".

Mr C. Oury and Mr Mikael Wetterström, both from the DNS Department, represented the ISSN International Centre at the meeting of the European RDA Interest Group in Riga (May 2016). In November 2016, due to a date conflict with the ISSN Directors' Meeting, the ISSN International Centre was not able to send a representative to the meeting of the RDA Steering Committee in Frankfurt. The ISSN Network was represented by Mr Christian Schütz (ISSN Germany).

<u>EDItEUR</u>

The ISSN International Centre is a member of EDItEUR, the organization in charge of developing and maintaining the standards of the publishing industry, including ONIX and ICEDIS (ONIX for serials). The ISSN International Centre participated in two ICEDIS meetings in April 2016 and in October 2016.

2.2.5. The development of ROAD in 2016

Due to the decision to include the service in the new ISSN portal, the Directory of Open Access Scholarly Resources did not undergo significant changes in 2016.

Ms Nathalie Cornic, deputy head of the DNS Department, spoke about ROAD at the annual seminar Discovery and Discoverability held at University College London in January 2016. An article about ROAD was published in IOS Press and in ELPUB digital library, as part of the 2016 conference proceedings6.

As of 31 December 2016, ROAD cumulated 17,350 OA publications, showing a global increase of 4,000 new publications compared to December 2015. The breakdown in types of publications demonstrates a clear evolution in favour of scholarly blogs, especially those published by the French publisher OpenEdition to which ISSN were assigned in 2016.

The new CiteScore metrics devised by Scopus was also added to the list of impact factors used in ROAD.

Workshop-on-Serials.pdf.

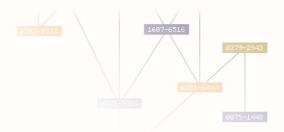
³ See <u>https://halshs.archives-ouvertes.fr/halshs-01358415/document</u>.

⁴ See <u>https://www.oclc.org/content/dam/oclc/events/2016/IFLA2016/presentations/RDA-in-the-Wilder-World-</u>

⁵ See <u>http://library.ifla.org/1602/1/114-oury-en.pdf</u>.

⁶ https://elpub.architexturez.net/doc/oai-elpub-id-120-elpub2016





2.3. Sales, Marketing and Communication Department

The main missions of this Department are to promote ISSN, communicate about ISSN services worldwide, and sell ISSN services tailored to customers' needs.

2.3.1. Sales

Compared with the 2015 turnover, the 2016 turnover slightly decreased mostly because publishers requested less ISSN certificates. However, the turnover for the ISSN Portal and the ISSN Data File increased in 2016.

The distribution of the turnover was quite stable compared to 2015. The most successful services remain the access to ISSN Portal and the ISSN Data File. In 2016, the ISSN International Centre changed its policy regarding the duration of contracts for the use of ISSN Data File.

2.3.2. Communication and marketing activities

In 2016, the Sales, Marketing and Communication Department led various activities in this field:

- The promotion of ISSN services at various professional exhibitions;
- The development of a Spanish version of the ISSN website;
- The registration of ISSN acronym and logotype in a few countries;

- The development and implementation of a Customer Extranet that will allow institutions to manage their subscriptions and publishers to request ISSN and track the assignment process.

Promotion and outreach

In 2016, the Department sent representatives to the following events:

- Abu Dhabi Book Fair (April 2016, UEA),
- IFLA (August 2016, Columbus, USA),
- Frankfurt Book Fair (October 2016, Germany),
- Guadalajara Book Fair (October-November 2016, Mexico).

In 2016, the Directors' Meeting was held in Brazil (Brasilia) and the ISSN International Centre exhibited in Mexico (Guadalajara). Hence communication and promotion activities were focused on Latin America. However, the department met different issues in attempting to do so:

- Only a few professional publications were identified and they did not publish ads;

- Contacts with the editorial staff of professional publications and publishers' associations were not successful.

Despite these glitches, ads in Spanish were published:

- on Latindex website: http://latindex.org/latindex/noticia?id=283;

- on the website of the Asociación Uruguaya De Revistas Académicas: http://aura.edu.uy/index.php/2016/10/12/el-registro-internacional-y-el-repositorio-road/.

The ISSN National Centre in Colombia passed on the ad to Colombian publishers referenced by ISSN Colombia and its partners. The ISSN International Centre received some feedback from Colombian Open Access publishers requesting to be included in ROAD.

Institutional website issn.org

As requested during the last Directors' Meeting in Brazil, the ISSN International Centre developed and implemented a Spanish version of the ISSN website (http://www.issn.org/es). Several colleagues working in ISSN National Centres agreed to read and correct the translated documents. The Spanish version of the website has been available since March 2017.





Intellectual Property Rights Protection

The ISSN International Centre has recently been faced with recurrent attempts of companies or individuals to counterfeit its services. To counter this phenomenon, the following actions have been taken:

- registration of ISSN logo and acronym with INPI (Institut National de la Propriété Intellectuelle in France) and with OHIM (Office for Harmonization in the Internal Market for Europe) under more appropriate classifications;

- extension of the registration to China, United States of America, and the Russian Federation.

ISSN on Social Media

ISSN is a well-known brand on social media. The ISSN Facebook page (https://frfr.facebook.com/ISSNInternationalCentre) has reached 1636 likes in March 2017. The Slideshare page (https://www.slideshare.net/ISSNIC40) is regularly updated with ISSN International Centre's and ISSN Network's presentations. There have been 29 presentations published as of March 2017. The ISSN_IC twitter account also shows promising statistics. As of late December 2016, ISSN_IC twitter account had approximately 300 followers whose interests are focused on professional matters in ISSN International Centre domains of expertise: scholarly publications, information science and technology, library science.

The ISSN Newsletter

The ISSN Newsletter, edited by the Data, Network & Standards department, consists in a press review about the topics relevant for the ISSN community. Two new topics were added to this list in 2016, i.e. scholarly communication and open access. As of December 2016, there were 5,950 subscribers, with an average monthly increase of 100 new subscribers. The number of subscribers doubled in 2016 (3,100 subscribers in 2015).

2.4. IT activities

2.4.1. Technical support to the ISSN International Centre

The ISSN International Centre switched to a new partner to oversee its local computer system (local PC network, servers hosted on the premises). The ISSN International Centre had been cooperating for a number of years with another company in the framework of the partial outsourcing of these services. Following an unfortunate incident in March 2016 which showed some deficiencies in the management of backups, it was decided to check the possibility of seeking a new partnership. A new contract was eventually signed with another company as from July 2016. It was agreed that two days per month of onsite services were needed (instead of two half days previously). Thanks to this new partnership, some aspects of the local IT management have begun to be streamlined and improved.

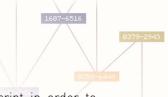
The ISSN International Centre switched at the same time to a new Internet provider with higher connection speed (up to 20 Mbits/sec). A further switch to fiber connection is being tested for a similar pricing. A backup ordinary ADSL connection was also parameterized so as to be able to switch quickly in case of a failure of the default one.

The response time of the institutional web site (www.issn.org) was notably improved thanks to the installation of a cache plugin and to a modification of the captcha anti-spam form protection add-on.

In the framework of data quality improvements for the ISSN Register, a thorough check of the structural validity of URLs stored in tag 856 of ISSN records was performed leading to the correction (and manual checking in a number of cases) of some 20,000 URLs. A new local validation rule was added to the Virtua system preventing cataloguers from entering wrongly structured URLs.

The IT Department is involved in the new Extranet and Portal projects implemented by the Progilone Company. It has developed a script giving access to ISSN centre / country data stored in the





institutional web site to the new Extranet software. It has also developed a script in order to regularly extract a fully validated and enhanced version of the ISSN Register for its ingestion by the new Portal.

In cooperation with the Sales department, the IT Department has made available to a publisher an API for the checking of the title history on the basis of ISSN links as well as an API for ISSN/ISSN-L checking.

In cooperation with the German ISSN National Centre, a new workflow was also set up with Springer so as to manage ISSN assignments and initial provisional ISSN records for their publications on the basis of the metadata provided by the publisher in a tabular format.

The IT department has also improved the process for the production of the PDF version of the ISSN Manual from the XHTML master version by using an intermediate conversion to LaTeX through an XSLT worksheet.

2.4.2. Technical support to ISSN National Centres

The IT Department helped with the transition of ISSN National Centre in Germany to a new cataloguing workflow integrated within the Deutsche Nationalbibliothek and the Zeitschriftendatenbank, German Union catalogue of serials. A script regularly harvests the ISSN OAI-PMH repository in Germany and another script converts the corresponding records according to specific rules taking into account the specificities of local cataloguing rules. At the onset of this new workflow, the very last batch of Osiris records which were still in the local German database was converted and imported into the ISSN Register.

A retrospective workflow for the import of records from the ISSN National Centre in Turkey has also been set up. Furthermore, it has also processed batch ISSN assignment requests originating from the Ulrich's database so as to streamline their processing by the corresponding ISSN National Centres.

Cooperation with the ISSN National Centre in Italy is still ongoing in the framework of the SAIISA project (retrospective processing of records from the Union Catalogue). A similar project is under way with ISSN National Centre in Spain.

3. Cooperation with partners external to the ISSN network

3.1 EDINA: The Keepers' Registry

On 6 and 7 June 2016, EDINA (University of Edinburgh) and the ISSN International Centre hosted a workshop as part of the Keepers Extra project. The event brought together representatives of the archiving agencies and libraries reporting into the Keepers Registry and other key stakeholders such as Research Libraries UK, Coalition for Networked Information and Digital Preservation Coalition, to explore potential international action to increase the preservation coverage of e-serials. Following the face to face discussions, the Keeper agencies were invited to submit prioritised suggestions for actions that could be undertaken by different stakeholder groups in order to support e-journal archiving.

A statement entitled Working Together to Ensure the Future of the Digital Scholarly Record was published after the meeting. It outlined the actions required to tackle the evolving challenges of preserving and ensuring the long-term accessibility of digital scholarship.

This statement has been endorsed by the International Alliance of Research Library Associations (IARLA), the Ivy Plus Libraries Collections Group, King's College London, UK, Pacific and Regional





Archive for Digital Sources in Endangered Cultures (PARADISEC), Australia, Council of Prairie and Pacific University Libraries (COPPUL), Canada, among others.

3.2 . ABES: Implementation of CIDEMIS

CIDEMIS is the automated system developed by ABES (French Bibliographic Agency for Higher Education), the National Library of France (BnF) and the ISSN International Centre. Its goal is to dematerialize the workflow of ISSN assignment and correction requests sent by ABES to the ISSN National Centres. This system was developed with the support of the ISSN International Centre and the BnF. It was launched in June 2015 and further improved in April 2016. A first assessment of the system was presented during the Directors' Meeting in Brasilia in November 2016.

In 2016, 1,645 requests were sent to ISSN National Centres via CIDEMIS (1,377 assignment and 268 correction requests). A total of 769 requests were processed (593 assignment and 176 correction requests), i.e. a rate of 47%. However, some requests may have been processed but not yet reported.

The CIDEMIS system represents a new workflow that needs to be included in the daily operations of the ISSN National Centres. It is now technically up and running but some organizational matters (for example the systematic reporting in Excel sheets; what language should be used to exchange information with publishers...) need to be improved.

A survey about the scope of ISSN assignment by National Centres was set up in order to better identify the kind of resources the National Centres exclude from ISSN assignment, so that CIDEMIS requesters can be better informed.

3.3. ProQuest: Enhancement of ISSN coverage in Ulrich's database

The joint project with ProQuest has been slowed by a change of staff on ProQuest's side. A new person has been appointed and shall be our contact point for data exchanges.

The ISSN National Centre in the Netherlands has received all titles mentioned in Ulrich's database without ISSN and published in the Netherlands. They are currently being processed. The ISSN National Centres in Sweden and in the United Kingdom have also received records for them to process according to the availability of staff and resources.

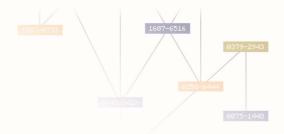
4. ISSN Award

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 register.

The 2016 ISSN Award was granted to the ISSN National Centre in Colombia. Mr Carlos Cifuentes, who works as librarian at the National Library of Colombia, attended a one-week training and information session on the ISSN International Centre's premises in October 2016.

The ISSN Award shall evolve in 2017 and be replaced by funding for regional training sessions. The first one will take place in Almaty, Kazakhstan, in April 2017. The ISSN International Centre will cover accommodation and travel expenses for a few participants.





5. Conclusion

2016 was a very fruitful year with many projects being launched regarding the enhancement and modernization of ISSN International Centre's operations. It was extremely rewarding to get the full support of our Member countries and our Governors who voted in favour of the new strategy and increased their membership contributions to the budget of the ISSN International Centre.

For the ISSN International Centre, it is both challenging and exhilarating to develop tools such as the new Corporate extranet and the full Web ISSN Portal. The first results of this enterprise shall be presented to the Board of Governors in April 2017 and to a larger audience as from September 2017.

