



CRIS 2014

Recent work by the euroCRIS Best Practice/DRIS Task Group: a way forward for engaging with the CRIS community

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Abstract

Providing specific outputs for the CRIS community from the euroCRIS Best Practice/DRIS Task Group has remained a pending task for quite a long time. This is a description of the strategy laid out by the new Best Practice/DRIS Task Group management for re-launching TG activity within the wider framework of a euroCRIS service catalogue. A deeper engagement with the CRIS community is presented as one of the main challenges to achieve in forthcoming months in order for this strategy to deliver.

Following the recent change in the TG management, the first guidelines have now been put together for achieving a gradual increase in the coverage of the Directory of Research Information Systems (DRIS) and the production of Best Practice dissemination materials related to CRIS implementation and operation in different areas. The DRIS and Best Practice sub-strands are perceived as mutually reinforcing, as well as tightly linked to other euroCRIS TGs such as CRIS/IR interoperability. Progress in all of these will require a deeper level of stakeholder engagement activity than the one carried out so far. A successful TG activity will thus strongly rely on the ability to promote participation in and feedback to the Group discussions. We expect the dissemination of useful Best Practice information on Current Research Information System implementation and operation to underline the gradual emergence of a professional CRIS community working together for mutual support and reinforcement. This will eventually attract new institutions to become part of such community both as users and as suppliers of valuable information, in the end leading to a higher degree of harmonisation and optimal performance at HEIs.

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1. Strategies for engaging with the community

These are difficult times for achieving a close, long-standing engagement with the HEI community. Very high workloads and tight budgets that will often restrict attendance to events both contribute to making the required interaction with institutions a hard objective to reach. On top of that, the number of non-profit initiatives whose work relies on free will contributions from member institutions has soared in these last years, with subsequent ever-increasing demands on professionals to take part in all sorts of working groups, online discussions and other unpaid activities on top of their regular dayjobs. All this has led to a situation where the already very busy staff whose contribution is required to build a collection of best practices is barely available for the purpose.

This is an especially pressing challenge for the Research Information Management (RIM) domain, an area where the sense of professional community is significantly lower than in other areas such as the Institutional Repository one. This may well be a consequence of the specific nature of the research support activity carried out by the teams involved in CRIS-related activity, which is both more internal and commercially-oriented than the average institutional information management initiative. A consequence of this more loosely bound CRIS professional community is the fact that the attendees to euroCRIS membership meetings held in different countries are rarely the same ones. This makes it particularly difficult to achieve progress with the work of most euroCRIS Task Groups, which is based on face-to-face discussions at membership meetings.



NAME OF CRIS SYSTEM	ACRONYM	INSTITUTION PROVIDING THE CRIS	COUNTRY
1. National CRIS			
CRIS of Russian Academy of Sciences	RAS CRIS / ASU RID RAN	Central Economics and Mathematics Institute of RAS (CEMI RAS)	Russia
NARCIS		Royal Netherlands Academy of Arts and Sciences (KNAW)	Netherlands
Slovak Current Research Information System	SK CRIS	Slovak Centre of Scientific and Technical Information (CVTI SR)	Slovakia
Slovenian Current Research Information System	SICRIS	Institute of Information Science (IZUM)	Slovenia
The Research and Development and Innovation Information System of the Czech Republic	R&D&I IS (IS VaVaI)	Office of the Government of the Czech Republic	Czech Republic
2. Institutional CRIS			
CRIS of University of Münster	CRIS@WWU	Westfälische Wilhelms-Universität Münster	Germany
Hanken Research Information System	HARIS	Hanken School of Economics	Finland
Integrated Information System of University of Évora	SIUIE	University of Évora	Portugal
KNAW Metis		Royal Netherlands Academy of Arts and Sciences (KNAW)	Netherlands
METIS Research Information System	METIS	Radboud University Nijmegen	Netherlands
Pure Leuphana	Pure@Leuphana	Leuphana Universität Lüneburg	Germany
Research Information System of Riga Technical University	ZDAS	Riga Technical University	Latvia
Research Support System		University of Glasgow	United Kingdom
Sistema de Informação para a Gestão Agregada dos Recursos e dos Registos Académicos	SIGARRA	Universidade do Porto (U.PORTO)	Portugal
Socionet	Socionet	Central Economics and Mathematics Institute of RAS (CEMI RAS)	Russia
SoleCRIS		University of Tampere	Finland
Stirling Research Management System	RMS	University of Stirling	United Kingdom
The HKU Scholars Hub		The University of Hong Kong	China
University of Kassel Research Information System		University of Kassel	Germany
3. Subject/Project CRIS			
EuroRIs-Net+ Research Infrastructures Observatory		National Documentation Centre (EKT) / National Hellenic Research Foundation	Greece
4. Vendor CRIS			
ARGOS CRIS		SIGMA Gestión Universitaria, A.I.E.	Spain
CONVERIS Research Information System	CONVERIS	Avedas AG	Germany
Pure		Atra A/S	Denmark

Fig. 1. The euroCRIS Directory of Research Information Systems (DRIS).

The DRIS/Best Practice TG is no exception to this barrier. The Task Group's two main goals, namely increasing the number of entries collected into the Directory of Research Information Systems (DRIS) and putting together a collection of best practice factsheets, will require a tight engagement with the community in order to discuss working procedures, to collect the required system information and to define useful best practice areas. It's no surprise then that the level of progress in the TG work has so far been remarkably slow as a result of the persistent lack of continuity in the discussions and its participants. We have a good evidence for this in the very low number of institutional CRIS entries recorded in the DRIS, which amount for a couple of dozens only (see figure 1 below) despite the fact that there are hundreds of them running just at European institutions.

In order to try to gradually increase the DRIS coverage as well as to start collecting examples for best practices in CRIS operation, the Task Group leadership decided to switch from the face-to-face TG meeting schedule held at membership meetings to an online monthly discussion with a limited number of regular attendees who would make up a fixed TG membership.

2. A 'new' DRIS/Best Practice TG

The nature of the tasks to be carried out by the DRIS/Best Practice TG makes it advisable to collect TG members who may to some extent act as informal national representatives for their countries: a good deal of the work to be performed revolves around information gathering, and the concept of national contact point – to be explored below – is a very useful one for the purpose of information collection.

Another relevant aspect when assembling the TG members is to try to provide a wide enough coverage for the different CRIS implementation models that have previously been identified, ie prevalence of institutional CERIF-compliant CRIS systems vs national or regional ones vs non-CERIF-compliant systems. In order to keep the size of the TG within reasonable limits while aiming for as wide a coverage as possible, the decision was made not to enroll more than one representative per country.

The 'new' TG membership should ideally include representatives from countries at different stages in CRIS implementation. It is of course advisable to have input from countries such as the UK, Germany, The Netherlands, Norway or Belgium where CERIF-compliant systems are widespread at both institutional and national level, since there is a lot of potentially very useful information to be collected from them both from a DRIS and a best practice enlargement perspective. However, it is also very convenient to have colleagues in the TG from countries where the CRIS implementation is still low, so that an accurate picture may be collected of the actual state of the infrastructure and opportunities are also made available for a knowledge transfer among countries in different situations.

The need to provide a balanced representation of the different technical solutions was also kept in mind at TG membership selection time, so that the role played by large and very advanced commercial CERIF-compliant platforms such as Pure or Converis in the countries where they are widely implemented may be compared to other situations where non-CERIF-compliant systems constitute the most frequent ones or where recently released open source CRIS systems like DSpace-CRIS are available. A particular effort was also carried out in order to collect a mixed membership from institutions, vendors and national coordination offices inasmuch as it was possible.

As a result of these considerations, and taking into account the fact that not every colleague who was invited to join the 'new' TG was able to accept the invitation due to work overload or to not being anymore working in the research information systems professional domain, a ten-member discussion group was assembled as of March this year with representatives from the Universites of Helsinki (Finland), Hong Kong (China), Leuphana (Germany), Lund (Sweden) and Porto (Portugal), plus Sigma (Spain), AMUE (France) and the Office of the Government of the Czech Republic, with the TG leaders providing representation from GrandIR Ltd (UK) and CINECA (Italy). An

online discussion group was created for exchanging information and holding online discussions, and an appointment was arranged for holding a first online meeting on Mar 19th.

3. Potential role of National Contact Points

Regardless of whether an additional national contact point organisational level were to be eventually adopted by euroCRIS – and there is presently some degree of consensus within the Board on the fact that it may be a bit too early for adding such level of complexity to the way euroCRIS operates – this is a particularly useful approach to dealing with the information collection processes which define the DRIS/Best Practice TG activity. In fact testing the role to be potentially played by euroCRIS National Contact Points in the collection of entries for the DRIS and of stakeholders interested in taking part in the process for putting together the best practice factsheets is one of the main goals of the current Task Group work. Some areas where National Contact Points could be particularly useful are the following:

- **Collecting entries for the DRIS.** As mentioned above, the present level of coverage the euroCRIS Directory of Research Information Systems provides is still very low when compared to other system collections such as the repository directories OpenDOAR and ROAR. One of the causes for this low coverage is the difficulty in reaching out to institutions in order to collect the information on their CRIS systems in a directory there is insufficient awareness of. Other causes are the rather complex questionnaire institutions must fill in in order to be featured on the DRIS and the fact that the effort for information collection for the directory has so far been restricted to the institutions where a CERIF-compliant CRIS system is run. Efforts are being done as well to tackle these latter issues, but the main improvement the DRIS TG is addressing at the time is to increase the level of awareness of the DRIS by bringing the information collection hubs closer to the institutions by means of the National Contact Points. These will be euroCRIS members leading coordination activities of some sort in their countries and willing to play a mediating role between euroCRIS and their national HEIs both for dissemination of the directory and for information collection purposes. The DRIS TG is presently starting to test this alternative procedure for collecting additional DRIS entries in countries like Portugal and Italy.

- **Collecting information for the best practice factsheets.** The objective of the best practice factsheets is to collect and concisely describe specific aspects of CRIS implementation and operation for the whole community to be aware of. Both for the identification of potentially useful topics for the factsheets and for delivering an adequate description, the participation of institutions in their elaboration is critical. The role National Contact Points are expected to play in this domain is again a double one, covering both the dissemination of the existing best practices and the scoping of potentially interesting areas for institutions in their countries and pioneering work by any of them that might be worth being described in a new factsheet.

- **Mapping national CRIS landscapes.** While reaching out to institutions in order to invite them to submit their CRIS information remains a top priority, one of the additional strategies the TG has come up with for increasing the DRIS coverage is a parallel research on the models for CRIS implementation under adoption in different countries, ie whether the default implementation model is for institutional systems to drive such implementation or if the management of research information is instead being led by national or regional CRISs, as it's often the case for countries now starting (or which recently started) to develop their research information management infrastructure, with a special emphasis on Eastern Europe where substantial activity in this regard has recently been taking place¹.

In an ideal situation, institutional and national/regional systems should co-exist, ensuring a smooth interoperability is available between the different levels and with external systems. There are in fact countries where these conditions are nearly met as a result of a careful initial design, however this is the exception rather than the rule and putting together the different approaches taken in various countries will help figuring out the most effective

strategies for CRIS implementation. The possibility of putting together national reports on the state of the art of CRIS/IR implementation are also under consideration within this strand for mapping the CRIS landscape at national level and will be kept in mind for future stages of this work. In the meantime, emphasis will be put on simplifying the process for information collection and collaborating with initiatives at national level for similar purposes – the first results of which were presented at the last euroCRIS membership meeting held Nov 2013 at the Universidade do Porto in Portugal².

4. euroCRIS Best Practice Factsheets: Collecting and Sharing Best Practices within the CRIS Community

Together with a strong effort for consolidating the euroCRIS organisation that has resulted in milestones such as the setting up earlier this year of a permanent euroCRIS Office in The Hague, the arrival of a new euroCRIS Board last Jan 2013 has been accompanied by a persistent reflection on the services the organisation should deliver to its members and to the CRIS community as a whole. These are envisioned to gradually arise during this Board's term and will eventually cover a wide range of areas – with again the participation of and feedback from the community in the process for service definition and design being a key input to be pursued.

One of the main contributions to be delivered by the Best Practice/DRIS TG to this joint effort has now started to be produced as euroCRIS Best Practice factsheets. These are short documents addressing specific aspects of CRIS implementation and/or daily operation, jointly put together by the TG management and selected members of the international CRIS community. Activity for their production will involve an intense interaction with institutions delivering their best practices in different areas, and the availability of Research office and CRIS managers to become engaged in the whole process by providing their highly-qualified feedback will represent one of the key assets the activity will offer the whole CRIS community.

The best practice reporting is meant to cover a wide set of areas and approaches, ranging from basic guidelines for CERIF-compliant CRIS implementation for institutions interested in running such a system, to advanced functionality in CRIS operation such as pioneering data visualisation techniques, exploitation of CRIS/IR interoperability or institutional ORCID implementation through Research Information Management Systems. The final objective of this workline being to make available information for institutions to benefit from in order to cover the specific needs they may have in different domains, suggestions for extending factsheet coverage into further areas will be very welcome, as well as proposals for teaming up with the TG management for highlighting new developments.

One of the main TG management findings upon analysing the current situation was that there is a significant lack of information about available CRIS solutions, their main features and implementation levels. Although the interest in such systems has been continuously rising in recent years, it is still not easy for an institution to have a complete overview of the options available when wishing to implement, upgrade or replace a CRIS system, and this is the reason why the first Best Practice factsheet addresses such topics by providing a description of the choices available at various stages together with an extensive feedback from institutions that have either gone through them or are currently undertaking such decision-making process.

The work on this strand has only started anyway at the time of submitting this contribution, but a few drafts for Best Practice factsheets are expected to be available for sharing at the CRIS2014 Conference next May. Relevant aspects of their production that will in the meantime be figured out include their final format – which is planned as a superposition of a generic introductory text on a specific best practice domain and a set of case studies for participating institutions in which the ways in which several institutions adopt such best practice are described – or

the procedures and privileges for accessing them on the new euroCRIS website that will be put together in the meantime.

Through this joint activity the Best Practice TG is hoping to be able to offer valuable, up-to-date content to the CRIS community that may be shared and re-used by its member institutions, fostering the setting up of collaborative networks that will eventually attract new institutions to join euroCRIS and become part of the CRIS community.

4.1. Factsheet no 1: Best Practices for CRIS Implementation

The first best practice factsheet deals with the process for choosing and implementing the CERIF-based CRIS solution that will best fit a given institution's needs. There is of course no one-size-fits-all roadmap for this process, as specific recommendations will very much depend on the present level of available RIM infrastructure at a particular institution, plus a number of additional factors such as the research activity areas that should be covered, the available technical expertise and the inevitable economic considerations.

In order to account for all these potentially different initial conditions, the factsheet addresses three different use-cases. A few considerations are added to the first two, most frequent ones:

- (i) where the institution is starting nearly from scratch, ie where only very basic tools such as spreadsheets are in place at the time for collecting information about the institutional research activity;
- (ii) where a preliminary solution such as an Institutional Repository (IR) is already available for reporting purposes but falls short of the perceived requirements at the HEI; and
- (iii) where some fully-functional CRIS is available which either does not comply with the CERIF standard or needs to be upgraded for some reason such as meeting the requirements of a specific research assessment exercise or aligning with the current landscape at national or regional level.

1. Use-case I: Starting from scratch

Emails are frequently received by euroCRIS Board members from institutions interested in collecting recommendations for implementing a CRIS system from scratch. There often arrive from small universities where the need for effective reporting on their research activity is becoming an important priority. It is strongly advised for these institutions aiming to learn more about the current landscape in CRIS implementation in order to eventually proceed with their own adoption process to become institutional euroCRIS members, since membership will provide opportunities at a rather affordable annual rate for effectively becoming part of the international CRIS community.

There are three basic options available when aiming to implement an institutional CERIF-based CRIS System from scratch: an in-house built solution, a commercial CRIS platform supplied by a vendor or an open source CRIS solution that may be locally configured at the institution. Factsheet no 1 presents examples and best practices for each of them three.

2. Use-case II: Upgrading an already available system to a CERIF-compliant CRIS

Institutions do often run some kind of system – such as an institutional repository (IR) or an ad-hoc implemented system – for internal research information management purposes. The CERIF standard is now quickly spreading across Europe, but has been rather obscure and unknown for many years. Many institutional RIM systems are non-CERIF-compliant as a result, despite being comprehensive enough and serving rather well the internal needs of the HEIs where they're run. However, the need for cross-institutional system standardization quickly arises when HEIs face reporting processes that require a harmonised input across a number of institutions, such as nation-wide research assessment exercises (like the REF2014 in the UK or recent similar processes in Italy and Portugal) or

reporting to funding agencies. CERIF is gradually consolidating as the best data model for facing such cross-institutional processes in Europe and it's not unusual that institutions wish to make their systems CERIF-compliant for interoperability purposes. In order to do so, previously existing systems can be either CERIFIED or replaced by a new commercial or open source platform where data will be migrated into.

4.2. *Factsheet no 2: Best Practices in CRIS/IR interoperability*

This second factsheet addresses the coexistence of current research information systems (CRISs) and institutional repositories (IRs) at the same institution and examines the way both systems can interoperate in order to reinforce each other's features. CRISs and IRs are often seen as mutually excluding systems, but there are frequent examples for institutions automatically collecting information into their CRISs from outside sources and offering access to the full-texts via the IR. The factsheet also explores the ever more widespread single-system use cases of IR-as-CRIS, where the institutional repository's functionality is enhanced to offer some basic CRIS features by extending its data model in order to cover additional entities such as projects or organisational units, and of CRIS-as-IR, where a CERIF-compliant CRIS will also host the full-text files and run an OAI-PMH interface thus effectively working as joint CRIS/IR system³.

4.3. *Factsheet no 3: Best Practices in CRIS-mediated institutional ORCID implementation*

The Open Researcher and Contributor ID (ORCID) is an international initiative launched Oct 2013 for providing unique and persistent author identifiers for scholars and researchers worldwide. Over 500,000 authors have registered with ORCID at the time of writing, and processes for institutional ORCID adoption are now being started at many HEIs in different countries. Current research information systems have a key role to play in such processes for institutional ORCID implementation, since they constitute the platforms where the research information is collected by default and from which it may be automatically transferred as metadata to other institutional systems. In fact, the most advanced CERIF-compliant CRIS systems have already evolved their data models in order to make room for the new identifier to be stored in them, following a CERIF-compliant federated identifier field structure that will allow additional author identifiers such as the ResearcherID or the ScopusID to be jointly held in the same table together with the ORCID iDs. This third factsheet explores the way different institutions are using their CRIS systems, either CERIF-compliant or not, to support institutional ORCID implementation.

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