

Proposal for
the production and distribution of

CERN COURIER

DECEMBER 2017



IOP Publishing

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Executive summary

IOP Publishing hereby submits its tender for the production and distribution of *CERN Courier*.

We have completed the Evaluation Questionnaire and the Tender Form, and have provided two copies of each. The financial basis of our bid is contained in the Tender Form plus, as requested, we have included a price-structure proposal for individual worldwide delivery of the print magazine.

This proposal, which we submit as supporting documentation to our bid, lays out the scope of the set of requested services and details IOP Publishing's capabilities against each (Part 1).

In addition, we present a framework for the development of *CERN Courier*, outlining how the current 10 print issues a year and accompanying website could evolve, resulting in a reduction in print frequency and increased focus on digital and online publishing channels (Part 2).

A financial summary and supporting financial model are also provided (Part 3 and Appendix 1).

Highlights from our proposal are noted below:

- The publishing contract for *CERN Courier* requires experience and skills in the distinct areas of design, production, advertising sales, digital/online publishing, marketing and circulation management. IOP Publishing excels in all these areas, evidenced by the fact that we currently provide a diverse portfolio of specialist publishing services to more than 35 international scientific organisations.
- As your publishing partner on *CERN Courier* since 1998, as well as through our journals, books and conference programmes, IOP Publishing knows the high-energy physics community – its readers and its specialist advertisers – better than any other publisher.
- We want to work with you to create a more compelling and engaging content offering built around a responsive, mobile-optimised website and digital magazine edition. As well as supporting readership acquisition in key territories such as China and Japan (without any increase in circulation costs), there is also a significant opportunity to convert existing print subscribers to digital, thereby delivering further savings.
- If our proposal to redevelop *CERN Courier* is accepted, the print magazine frequency will be reduced to six issues per year. By maintaining advertising revenues at the 10-issue level, however, we would expect savings on the aggregate publishing costs to reduce the total price of the programme to a point where *CERN Courier* is truly self-financing.

Introduction to IOP Publishing

IOP Publishing Limited is one of the world's leading publishers of scientific journals, magazines, books, reference works and electronic publications covering physics and related disciplines.

We are a wholly owned subsidiary of the Institute of Physics (IOP), a company incorporated by Royal Charter with charitable status whose mission is to promote the advancement and dissemination of knowledge in physics, pure and applied. IOP achieves this objective with activities such as science publishing (through IOP Publishing); setting professional standards for physicists and awarding professional qualifications; and promoting physics through scientific conferences, education and science policy. As a society publisher, all trading surpluses that are generated by IOP Publishing are gift-aided to IOP to further its objective of putting physics at the heart of science and society.

IOP Publishing employs more than 370 staff throughout the world, with major hubs in Bristol, Philadelphia, Washington DC, Beijing and Tokyo. Our mission is to deliver impact, recognition and value to the scientific community. Within our publishing operation there is a broad spectrum of professional experience across all divisions – journals, books, magazines, conference proceedings, specialist websites, sales and business development, IT, graphic design and illustration, finance, administration and human resources.

1. Excellence in aspects required for the CERN Courier contract

The publishing contract for *CERN Courier* requires experience and skills in the distinct areas of design, production, advertising sales, digital/online publishing, marketing and circulation management. IOP Publishing excels in all these areas and manages them all in-house, building our collective domain knowledge and capability over many years. The following section summarises our cross-functional expertise and current working model on the *CERN Courier* publishing programme.

Design and production

All design and production work on *CERN Courier* falls under the remit and management of IOP Publishing's award-winning Design Studio, headed up by Art Director, Andrew Giaquinto. Andrew has more than 30 years' experience as a Creative Director within the specialist publishing industry. Within the Studio team there is a combined 50+ years of staff experience allocated against *CERN Courier*, with Andrew and another member of his team having been constants since the contract was first awarded to us in 1998.

Figure 1. Top: A cover and example article layout from March 1998, before IOP Publishing took on the *CERN Courier* contract. Bottom: The December 2017 issue, showing how the design has evolved and improved.



Design

The IOP Publishing design team unifies the design and branding principles across IOP Publishing's core publishing programmes and a wide range of marketing and promotional outputs. As well as being responsible for all design matters for IOP and IOP Publishing, the Studio manages projects on behalf of many of IOP Publishing's publishing partners, most notably the American Astronomical Society, for whom we are currently undertaking a major branding project.

If awarded the new *CERN Courier* contract, IOP Publishing would commit to a full redesign of the magazine (print and digital editions) and *cerncourier.com* through 2018. Andrew Giaquinto would lead this project from our side, working in close collaboration with the Editor and other key CERN stakeholders to deliver a new-look design that will unify and enhance *CERN Courier*'s print, online and digital presentation.



Figure 2. The Design Studio unifies the design approach across IOP Publishing's core programmes.

Production

The core design principles for *CERN Courier* are interpreted on an issue-by-issue basis by our production team, working in close collaboration with the Art Director, Andrew Giaquinto.

Editorial production

Lizi Brown is the Production Editor exclusively responsible for *CERN Courier*. Lizi maintains a close working relationship with the *CERN Courier* Editor, in turn building up a comprehensive understanding of the magazine's requirements, principles and publication schedule. Lizi's remit covers the following core production activities:

- Magazine flatplan and editorial page layout.
- Sub-editing and text cuts to layout.
- Provision of page proofs.
- Picture research (when required).
- Ensuring image quality for print.
- Preparation of files to send to printer.
- Adding all magazine content to the *CERN Courier* website as individual posts.
- Producing a digital issue from a template created by the Design Studio.

Technical illustration

Another fundamental aspect of the *CERN Courier* production process is refining and drawing the technical diagrams and figures needed for news and feature articles. Alison Tovey, our Technical Illustrator, has worked on *CERN Courier* since 1998 and is heavily involved in every issue of the magazine, typically redrawing and relabelling between 10–20 figures per issue. Alison's input can vary from complete redraws of the figures (as the quality of those supplied is not always of print standard) or relabelling of already print-quality figures to adhere to the magazine branding (e.g. in terms of fonts and line weight).

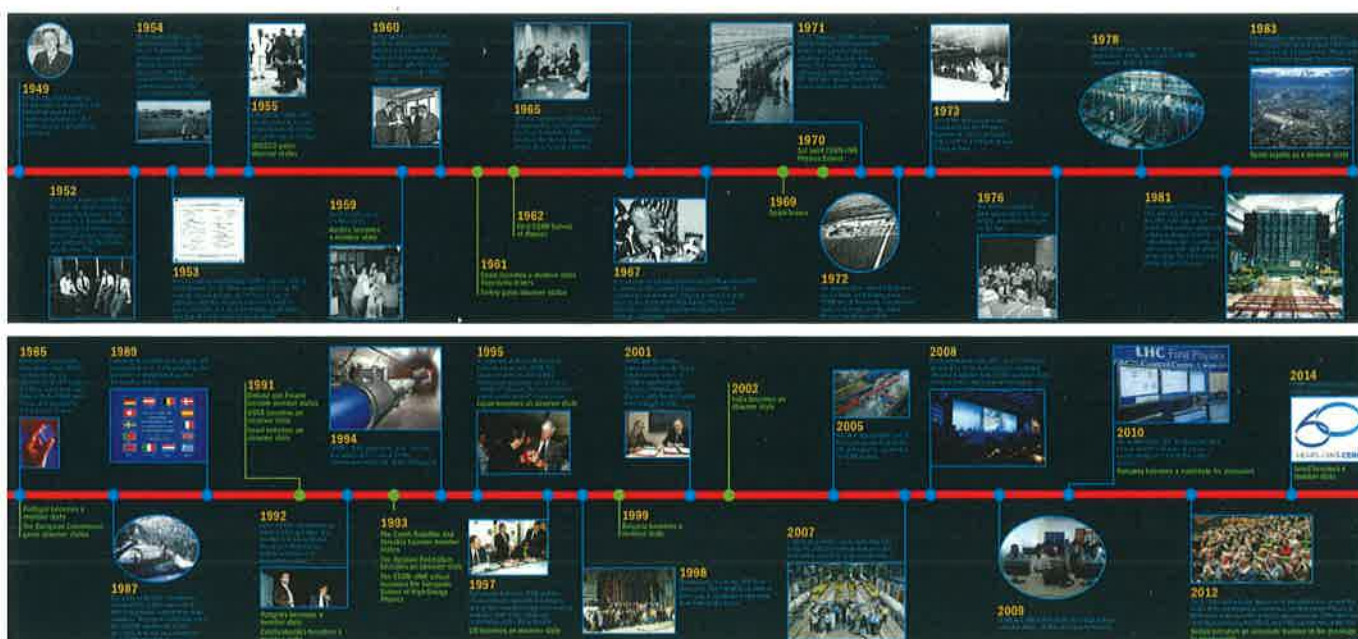


Figure 3. Alison Tovey, our Technical Illustrator, has worked on *CERN Courier* since 1998. Above is an example of Alison's work from the 60th anniversary issue in October 2014.

Printing

The production process implemented across all of our magazines ensures that our printers can easily process and print from our source files. Warners plc, the company that prints our magazines, has been our supplier of choice for more than 25 years. Warners' staff have always been proactive in helping us to improve and speed up our workflow, and in investigating and resolving any printing queries. Close attention is paid to quality control in terms of paper weight, image and colour reproduction, and management of print runs.

Scheduling

We agree fixed production schedules for each issue of *CERN Courier* before the start of each calendar year. The schedules define all the key milestones for each issue, starting with copy delivery and ending with delivery of the magazine to readers and to CERN. These schedules are distributed to the *CERN Courier* team (both at CERN and IOP Publishing) and to external suppliers (such as printers and our mailing house), ensuring that all contributing organisations and personnel can plan their workloads well in advance. On an issue-by-issue basis, our Production Editor monitors copy flow and all aspects of the production process, and works proactively with the whole team to manage any problems and ensure that all print deadlines are met.

In terms of distribution, there is also regular contact with account managers at our mailing house and freight forwarders to confirm quantities and delivery dates for each issue. We are alerted to any external factors that could potentially delay the distribution of the magazine, such as postal or transport strikes, and make plans to mitigate the impact on the delivery of the magazine.

Advertising sales and production

IOP Publishing has been the sole advertising provider to *CERN Courier* for almost 20 years. One member of staff has worked with the client base for the duration of the contract, while the rest of the team have on average 10+ years' experience each working with the *CERN Courier* client base. This means that IOP Publishing has the only established advertising sales team within the high-energy physics community.

Advertising sales

The Advertising Sales team is multilingual (speaking a total of seven languages – essential when dealing with *CERN Courier*'s global advertising base) and based in locations throughout Europe and in the US. The team is split between product (display) advertising and recruitment.

We have a database of more than 1000 relevant companies who we regularly speak to about display advertising. For recruitment advertising we have a database of all relevant facilities around the world who would want to recruit through *CERN Courier*.

Thanks to our experience in the community, the Advertising Sales team has an exceptional understanding of the *CERN Courier* target market. We work with advertisers in the most consultative way to ensure that we provide them with the best campaign solutions, which reflects well in the publication because all advertising is relevant to the readers.

A publication can very quickly have its hard-earned authority and prestige damaged through the advertising it carries. This has never been a problem while we have worked with *CERN Courier*, since we are rigorous in our vetting of advertisers before taking bookings. Because we

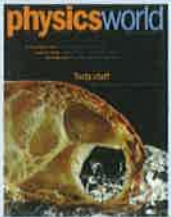
know the industry so well, we can make these checks ourselves without burdening the Editor with questions and queries.

The team is constantly generating new sales leads by following developments in the industry, working with funding councils, and attending numerous trade shows and conferences around the world. We also work with the Editor of *CERN Courier*, sometimes providing insights into developments within industry that may prove useful for content generation.

At the start of each year, we have an in-depth planning meeting with the *CERN Courier* Editor to discuss potential special issues for the year. The advertising base is often attracted by special issues covering topics such as CERN anniversaries, technology anniversaries and ground-breaking results. By planning as much of this as possible well in advance, we can dramatically increase the revenue for these special issues. By staying in regular contact with the Editor, we can also react swiftly and efficiently to ground-breaking news that may be of interest to advertisers.

Within IOP Publishing, we also sell advertising into many other publications that cover the physical sciences. This enables us to cross-sell advertising across a portfolio of products, allowing us to attract new advertisers who might not otherwise have been aware of *CERN Courier*. Advertisers much prefer this as they can work with one account manager to achieve different marketing aims.

Global sales



Our Advertising Sales team works across a range of specialist magazines and websites, including the award-winning *Physics World* portfolio. We are the advertising sales partner for the Chinese Physical Society's *Wuli* magazine and the European Synchrotron's *ESRF News*.

We are also a media partner for IAEA, IEEE and JSAP, taking on aspects of exhibition and/or advertising sales. The Advertising Sales team is always looking to expand the advertising base and attends more than 15 major trade shows and scientific conferences around the world each year.

For recruitment advertising, we have a number of online and digital recruitment solutions that we can use to enhance the print advertising offering. These include a jobs e-mail alert sent out via *cerncourier.com*, related jobs advertising through our online journals platform, and the ability to provide recruiter videos and webinars through *cerncourier.com* and our jobs website *brightrecruits.com*.

Advertising production

Katie Graham has managed the advertising in *CERN Courier* and *cerncourier.com* since the award of the publishing contract to IOP Publishing in 1998. Katie is a key part of the Advertising Production team, which is also responsible for handling advertising for a range of other IOP Publishing publications, including *Physics World*, *ESRF News* and numerous academic journals.

Katie has more than 20 years' experience in this field and has built up a great relationship with our advertisers, particularly those who advertise regularly. One such example is the Italian nuclear instrumentation company C.A.E.N., who coordinate the colour of their advertisement on the outside back cover of *CERN Courier* each month with that of the front cover.

Katie prides herself on being able to solve any problem that a client may have in terms of advertising production. These problems can range from software incompatibility to incorrect embedding of files. She always ensures that adverts are ready in time so that issues are never delayed.

The service that Katie and the Advertising Production team provide goes beyond the routine checking of advertising copy. A complimentary design and typesetting service for web and print adverts is available, ensuring that even clients who are unable to create their own assets are still able to book advertising space in *CERN Courier* or *cerncourier.com*. In effect, Katie acts as a design studio for many companies who, without her services, would not be able to carry out advertising campaigns with *CERN Courier*.

Our comprehensive advertising production service includes:

- Ensuring that advertising copy is received on schedule via close liaison with the client.
- Getting all technical specifications to advertisers and dealing with queries.
- Recruitment ads – a high percentage of recruitment advertising copy is sent to us as simple Microsoft Word documents. Katie transforms these Word documents into something appropriate for publication in *CERN Courier*.
- Advertorials (advertising features) – full-page text-based advertising designed to complement the core editorial pages.
- Display advertising – creation of advertisement materials to a client's guidelines, ensuring colour matching and correct fonts.
- Placing advertising in the correct position on the magazine flatplan.
- Banner adverts for *cerncourier.com* – creation of banner artwork that is acceptable to the client and the reader.
- Uploading banner advertising to *cerncourier.com*.
- Video content – creation of video advertising for clients.
- Creation of client microsites for advertisers in the *cerncourier.com* Buyer's guide.
- HTML 5 advertising copy, which requires integration of multiple file types.

The advertising production team possesses considerable experience in producing digital advertising for IOP's membership magazine *Physics World*. Digital publications require different advertising copy to render on various platforms and advertisers are often unaware of what they need to provide. This experience will be invaluable in supporting our planned transformation of the digital edition of *CERN Courier* in 2018/19.

Website and digital magazines

The first quarter of 2018 will see a major relaunch of IOP Publishing’s award-winning online science news service *physicsworld.com* – a significant reinvestment in science and a central part of our mission to communicate world-class research and innovation to the widest possible audience. The content “engine” for the reimagined *physicsworld.com* news service is a flexible and customized WordPress publishing platform.

WordPress technology initially emerged from the blogosphere but has matured into the *de facto* web choice for the specialist publishing industry. Right now, some 60% of websites that require a content-management system are built on WordPress technology. There are several drivers for this level of market acceptance:

- WordPress is an open-source platform, which provides easy access to plug-ins and development resource for more bespoke development.
- The WordPress content-management system is known for its ease of use and can also be accessed via an online interface, which gives editorial staff the flexibility to upload, publish and update content from any location as and when they want to.
- WordPress is Google-friendly, which ensures that all articles posted on a WordPress site are optimised to perform well in organic search. Articles are also easy to share via all main social-media platforms.
- WordPress is designed to work seamlessly on all sorts of devices, whether phone, tablet or desktop.

Figure 4. The relaunch of *physicsworld.com* in 2018 will inform our planned redevelopment of *cerncourier.com* on the WordPress publishing platform.



With these benefits in mind, we are committing to migrate and relaunch the *CERN Courier* website and digital magazine onto our new WordPress technology platform by the end of 2018. More specifics on our relaunch plans for the *CERN Courier* website and the digital magazine can be found in Part 2 of this document (“Proposal for the future”, page 15).

Circulation and distribution management

The circulation and distribution of *CERN Courier* is managed by the same in-house team that manages the circulation of our flagship membership magazine *Physics World* – thereby ensuring consistency of service and best-practice arrangements with our suppliers. The correct number of print copies of the magazine are delivered directly to our mailing house, where they are poly-wrapped along with a carrier sheet. Digital proofs of the carrier sheet are provided to the circulation team at IOP Publishing, where they are checked for consistency and accurate data presentation. The same circulation team keep track of the deliveries, passing any returns back to CERN so that details can be amended on the database.

The magazine printers also package up boxes of *CERN Courier* for bulk delivery to selected research facilities via our distribution agency. By packaging these shipments at the point of printing, we ensure that the number of copies requested is fulfilled, and reduce the opportunity for miscounting further down the supply chain.

We review suppliers on a regular basis to ensure that we are receiving the service that offers the best value for money. We identify suppliers who offer the best price, strict adherence to data-protection policies, timely delivery, strong links with international mail services, and a consistent account manager who can develop a detailed understanding of our needs.

Cost control

We have an annual budgeting process to ensure that we regularly review all costs associated with producing and distributing our publications. In the case of *CERN Courier*, the most significant direct costs are print, paper, postage and distribution. For print and paper, we recently conducted a competitive review of our current supplier against a number of other printers; that review confirmed that our current printer continues to offer us the best value for money. For distribution, our mailing house constantly monitors postage rates across all countries and geographic regions to ensure that we keep our postage costs to a minimum. They provide an annual review of the mailing and fulfilment costs to ensure we select the most cost-effective distribution route to suit our requirements.

Marketing and promotion

CERN Courier currently benefits from a variety of marketing activities, including a new-issue alert e-mail that is sent to more than 20,000 subscribers. This e-mail alert informs readers that the latest issue is available and highlights key editorial themes, special issues and high-profile interviews.

The magazine is also distributed at more than 40 major scientific conferences each year, including IPAC (International Particle Accelerator Conference), ICNS (International Conference on Neutron Scattering), AVS (American Vacuum Society Annual Meeting) and WIRMS (Workshop on Infrared Microscopy and Spectroscopy using Accelerator-based Sources). Conference distribution ensures that *CERN Courier* is visible to a global audience of relevant readers.

Continuity of service

Although we have key personnel who are dedicated to producing *CERN Courier*, other specialist staff in the organisation are aware of the main work processes involved in delivering the magazine and website. This means that we can cover temporary absences such as holiday and sickness with no impact on delivery. When key personnel change, we ensure a proper handover of tasks and knowledge, both through work shadowing and through comprehensive documentation for future reference. More generally, IOP Publishing has a Business Continuity Plan for maintaining our activities in various scenarios that might impact the whole business.

CERN Courier also benefits from enhanced visibility through IOP Publishing's wider marketing and promotion campaigns within the high-energy physics community. We have an established portfolio of products in the field of high-energy physics. These include peer-reviewed journals, such as *Journal of Physics G: Nuclear and Particle Physics*, which celebrated its 50th anniversary in 2017, and the partner title *Chinese Physics C*, which is participating in the second phase of SCOAP³. *New Journal of Physics*, co-owned by the Institute of Physics and Deutsche Physikalische Gesellschaft, was the first open-access journal to publish original research across all areas of physics.

The IOP Publishing ebooks programme includes titles covering high-energy physics for undergraduates through to advanced students and senior scientists. Researchers based at CERN have published books with us: *From Particle Physics to Medical Applications* by Manjit Dosanjh, for example, discusses CERN's contribution to our understanding of the fundamental particles and their interactions. The open-access *IOP Conference Series* publishes proceedings from across the physical sciences, and has worked with conferences in high-energy physics, such as the 10th International Workshop on High-pT Physics in the RHIC/LHC Era and the 20th International Conference on Computing in High Energy and Nuclear Physics (CHEP2013).

Partner publishing

IOP Publishing is an experienced specialist publishing partner with a diverse customer base made up of leading scientific organisations. Across magazines and specialist websites, we have provided publishing services to the European Synchrotron (ESRF), the Brazilian Physical Society and the Brazilian Materials Research Society. We also provide publishing services for journals and ebooks to more than 35 international organisations, including the American Astronomical Society, the European Physical Society, the International Atomic Energy Agency, and the Chinese Physical Society with the Institute of High Energy Physics, CAS, and the Institute of Modern Physics, CAS.

Combining society publisher credentials with commercial efficiencies and industry expertise, we can offer CERN expert guidance and advice on critical publishing issues, such as moving from print to online, cost control and international audience development. Having worked with the high-energy physics community through our journals and books programmes, and more specifically as your publishing partner for *CERN Courier* since 1998, we know this specialist advertising market and your scientific readership better than any other publisher.

Reporting

In terms of maintaining close working relationships with key stakeholders at CERN, we would like to propose not just the annual face-to-face meeting specified in the Technical Specification, but also regular (we suggest quarterly) meetings between IOP Publishing's Commercial Operations Manager, Edward Jost, and the Editor of *CERN Courier*. Edward oversees the Advertising Sales team and so is well placed to discuss advertising ideas and new revenue opportunities with the Editor. From January 2018, Edward will also be the designated Account Manager for the CERN Courier contract.

We will commit to providing detailed quarterly reporting, as specified in the Technical Specification, and will include the following information:

- Advertising sales performance (display and recruitment, print and online).
- Postage costs for distribution.
- Web statistics (a full analytics dashboard will be introduced to monitor all aspects of audience engagement and growth).
- Performance indicators as specified in Annex A (plus any others deemed important by mutual agreement).

Given our proposal to redevelop and relaunch *CERN Courier* across print, online and digital channels (see Part 2), it will be crucial to agree a set of key performance indicators for the new portfolio in spring 2018; also to finalise the planning and time frame for a move from the current offering to our proposed new publishing model.

2. Proposal for the future: CERN Courier and cerncourier.com

Our development roadmap for the future of the *CERN Courier* publishing programme involves an ambitious and all-encompassing overhaul of print, online and digital outputs.

There are three core development priorities that underpin IOP Publishing's proposal for the *CERN Courier* team if we are awarded the new publishing contract.

1: Reduce the frequency of the print magazine from 10 to six issues per year, with a high level of confidence that we can maintain advertising revenues at the 10-issue level.

On the financial side, this would have the advantage of reducing print, paper and production costs as well as yielding significant savings in distribution. What's more, we do not believe that reducing from 10 to six issues would cause problematic attrition for advertising revenues. We currently have just six advertisers who have a presence in all 10 issues of *CERN Courier*. For these companies, we believe that an enhanced online offering will allow us to convert print advertising spend into new online campaigns. We also see a potential "upsell" opportunity, with advertisers that currently only use three or four print issues inclined towards six issues to be present in the full-year print programme.

2: Redesign, redevelop and relaunch cerncourier.com on our WordPress technology platform, with a solid content growth plan to ensure that the website becomes much more than a static online repository for magazine content.

The evolution to a responsive, mobile-optimised website is a key driver here. Equally important is the opportunity, enabled by the reduction in print-issue frequency, for the *CERN Courier* Editor to rethink the current magazine-driven publishing model and move towards online delivery of daily news, features and interviews additional to the primary magazine content. Creating the conditions for that content growth plan means more content to support growth in online readership and, in turn, potential growth in online advertising revenues.

3: Develop an enhanced, mobile-optimised digital magazine edition as an integral content programme within the new-look cerncourier.com.

A responsive and mobile-optimised digital magazine edition will open up another channel for reader acquisition, one that will be far more compelling versus the current interactive PDF version of the *CERN Courier* digital magazine. As well as supporting new reader acquisition in key territories like China and Japan (without any increase in circulation costs), there is also a significant opportunity to convert existing print subscribers to digital, thereby delivering further savings.

Figure 5. The development of a responsive, mobile-optimised cerncourier.com is a key part of our proposal. On the right are draft designs for the homepage, showing desktop and mobile presentations.



Figure 6. Draft design for an article-level page for desktop and mobile.



cerncourier.com: benefits of the WordPress technology platform

Our proposal for *cerncourier.com* is based around migration of the site onto a WordPress platform optimised for online news and magazine publishing – and specifically the exploitation of a customised WordPress development for our soon-to-be-relaunched science news site *physicsworld.com* (relaunching in Q1 2018).

As we envisage it, the new *cerncourier.com* would provide online access to the *CERN Courier* magazine on an issue-by-issue basis as well as presenting more regular (daily/weekly) news and feature updates of interest to the high-energy physics community.

We have worked with a specialist WordPress agency to customise the basic WordPress platform to meet our needs as a publisher of scientific news and specialist information services. The customisation reflects the fact that we will be publishing magazine content alongside daily news updates (see accompanying visuals on page 16). Highlights include:

- One key innovation has been to provide our editorial staff with the ultimate flexibility to change and optimise the layout of web pages without the need for developer resource.
- Through the content-management system, editors can construct web pages “on-the-fly” by choosing from a number of predefined content “modules” that can be placed in any order on the page.
- Each module is a horizontal block that can contain multiple content elements.
- The content displayed in each module can either be filled automatically (e.g. the three most recent news stories) or they can be hand-picked by the Editor to highlight a particular piece of content or a specific subject area.
- This functionality can be used to create special collections of content – for example, to bring together content on a specific topic of interest to the high-energy physics community. This would also offer the ability to create an issue-by-issue presentation of *CERN Courier* magazine; we would be able to create a page that mirrors the contents page of the issue, essentially replicating the magazine experience within an online environment.
- All of our WordPress sites are hosted by WP Engine, which provides best-in-class management of site performance and security, along with 24/7 technical support.

Another key feature is integration of e-mail newsletter functionality, which for *cerncourier.com* would enable us to send out both a new-issue alert (as currently) plus a more regular weekly newsletter containing the latest news updates posted on the site. To support this capability, we would also provide a customised registration process to enable readers to securely manage their e-mail preferences.

Other customisations that we would make available to *cerncourier.com* include:

- An events calendar that enables readers to add their own events, subject to publisher approval.
- A customised approach to organising content by both subject area and article type, making it easier for readers to navigate to the content specialism that interests them.
- Novel ways to highlight related content, including a manual “Editor’s Pick” plus automatically generated related content at the foot of every story.
- Optimised print and PDF download options for individual articles.
- Analytics on site usage and performance, generated via Google Analytics, plus profiling of readers’ behaviour for registered users to get a real insight into the most popular content.

- Sharing of content to various social media channels, including a bespoke “click to Tweet” option.
- Custom metadata fields to associate magazine articles with a particular issue and volume.
- Creation and delivery of bespoke marketing messages through the content-management system – for example, to highlight the latest issue or to promote a key event/activity at CERN.
- Migration of all existing archive content to the new platform.

Requirement for a mobile-responsive digital magazine

In our view, this requirement would be best delivered through the customised WordPress platform – i.e. as an integrated content service delivered within the new-look *cerncourier.com*.

Key advantages of this integrated content programme include:

- A bespoke page can easily be created as a “contents page” for each issue.
- A page can also be created to provide an index of all available issues, allowing readers to access the current issue as well as the archive.
- Metadata set within the content-management system would allow the articles to be associated with the correct issue and volume number.
- The presentation would be optimised for mobile use, and we will be exploiting AMP (Accelerated Mobile Pages) technology to ensure high-quality performance on mobile and tablet devices.

We recommend this converged solution over a separate digital magazine edition because:

- Our experience to date with *Physics World* indicates low usage for our current app-based digital magazine approach.
- All content is in one place (*cerncourier.com*), so readers go to a single destination for browsing and searching *CERN Courier* content.
- A single version of record for indexing/citation purposes.
- A converged digital magazine/website solution is on our development roadmap for *Physics World* magazine, but CERN would benefit first.
- Reduced cost and complexity associated with setting up and producing the digital magazine (avoiding third-party licence costs that we currently incur for *Physics World*).

XML feed to CERN internal document system

We have done some exploratory work to fulfil a requirement from the CERN library service, which wants an XML feed containing all *CERN Courier* content on a monthly basis along with some associated metadata that would enable them to ingest the content into their internal document system. This document system is a repository for all content generated at CERN, and the library service currently have all *CERN Courier* content up to the end of 2013. Our initial evaluation suggests that we could provide the necessary feed for a marginal cost per issue, which would include a small amount of in-house production time.

Marketing and promotion to increase international readership

As well as overhauling the print, online and digital presentation of the *CERN Courier* programme, there are a variety of parallel activities we will carry out to raise the visibility of *CERN Courier* with the international high-energy physics community. These activities include:

- Monthly advertising campaigns using a variety of channels (such as Google Adwords and social media) to raise the profile of *cerncourier.com* and the new-look digital magazine. Promoting the online and digital products to new readers will ensure cost control on distribution while increasing the readership globally.
- Monthly cross-promotion campaigns to target high-energy physicists within the combined magazine and web subscriber base (>100,000 scientists) of *Physics World*.
- Monthly promotional campaigns to high-energy physicists within IOP Publishing's global database of journal authors, referees and readers. These campaigns exploit multiple channels, including e-mail marketing, direct mail, online advertising within our *IOPscience* journals/ebooks platform, as well as scientific conferences attended by IOP Publishing editorial and commercial staff.

Timescale

To implement the changes outlined in our "Proposal for the future", it will be imperative to plan and execute with due consideration. For example, the Advertising Sales team has already embarked on selling revenue into the current 10-issue *CERN Courier* schedule for 2018. The forward-bookings sales cycle for 2018 advertising got underway in October, and while we could potentially manage a conversion of the booked 2018 advertising from 10 issues to six, it would be more sensible to plan throughout 2018 for a full programme relaunch in January 2019 – i.e. the introduction of the newly redesigned print magazine (at six issues frequency) alongside the concurrent launch of a new-look *cerncourier.com* and an enhanced digital magazine offering.

Of course, we realise that our "Proposal for the future" will need to be discussed with stakeholders at CERN to ensure agreement for the proposal itself, the implementation plan, the key performance indicators and the roll-out schedule. The following is a rough guide to the key tasks that will need to be completed in 2018 and 2019.

2018 (still 10-issue frequency for the print magazine)

- Complete redesign and migration of *cerncourier.com* to WordPress platform by end 2018.
- Develop enhanced and mobile-optimised *CERN Courier* digital magazine.
- Agree print-to-digital conversion criteria for subscribers and produce digital circulation-conversion plan.
- Agree plan for moving to a six-issue frequency of *CERN Courier* magazine from January 2019.
- Magazine redesign proposals and presentations to take place mid-year, with sign-off in Q4 ready to implement new design for the first of the six issues in 2019.
- Firm up editorial growth plan for *cerncourier.com* in collaboration with the *CERN Courier* Editor.
- Forward bookings to be based on six issues in 2019. The advertising plan needs to maintain revenues.
- Sell enhanced print/online/digital advertising packages in Q4 forward bookings cycle.

2019

- Launch at six-issue frequency for print magazine and with new-look design for first issue of 2019.
- Relaunch *cerncourier.com* on WordPress platform.
- Launch enhanced, mobile-optimised digital magazine.
- Implement print-to-digital circulation conversion campaigns.
- Plan and implement growth of digital circulation in prioritised geo regions (e.g. China).

We have not included financials for our “Proposal for the future” as the details will need to be agreed in close consultation with CERN. In broad terms, however, it is safe to assume that there would be a significant reduction in print, paper and distribution costs with the move from 10 to six print issues per year and opportunities for further savings if a print-to-digital conversion exercise was carried out with existing print subscribers.

As stated earlier, we are confident that advertising revenues would be maintained at around current levels. In terms of cost increases, there would be marginally increased costs for the new website and digital magazine, and some marketing campaign costs that are not currently incurred. However, these cost increases are marginal and the proposal will deliver overall savings as well as a more engaging and compelling *CERN Courier* portfolio.

Appendix 1. Financial model and price structure

Table 1. Three-year financial model based on current 10-issue scenario.

£'000s	Year 1	Year 2	Year 3
	2018	2019	2020
Advertising revenue	361	372	384
Lump sum price (A)	215	215	215
Variable cost (B)	155	155	155
CERN royalty (C)	258	262	265
Total price	112	108	105

Table 2. Price structure for individual distribution.

EUROPE	No. of Items	Unit cost £	Total cost £				
AUSTRIA	345	1.0084	347.883	ITALY	637	0.5746	366.047
BELGIUM	507	0.6687	339.039	LATVIA	3	0.6955	2.087
CROATIA	36	0.5990	21.566	LITHUANIA	13	0.6955	9.042
CYPRUS	7	0.9292	6.504	LUXEMBOURG	16	1.1336	18.137
CZECH REPUBLIC	81	0.3977	32.213	MALTA	4	1.0762	4.305
DENMARK	148	1.2902	190.946	NETHERLANDS	258	0.5136	132.500
ESTONIA	5	0.5871	2.935	NORWAY	157	1.8459	289.803
FINLAND	92	0.7842	72.143	POLAND	161	0.4813	77.483
FRANCE	1738	0.9365	1,627.613	PORTUGAL	123	0.8045	98.957
GERMANY	24	0.8598	20.635	ROMANIA	157	0.4575	71.831
GREECE	196	0.9539	186.962	SLOVAKIA	48	0.6397	30.705
HUNGARY	69	0.5151	35.544	SLOVENIA	17	1.0067	17.114
ICELAND	3	1.2460	3.738	SPAIN	269	0.5790	155.743
IRELAND	17	1.2553	21.340	SWEDEN	220	0.6756	148.626
				SWITZERLAND	1246	0.7498	934.276
				UNITED KINGDOM	22	1.0710	23.562

REST OF THE WORLD						
AFGHANISTAN				CAYMAN ISLANDS		
ALBANIA	3	1.1193	3.358	CENTRAL AFRICAN REPUBLIC		
ALGERIA	104	1.1174	116.205	CHAD		
ANGOLA				CHILE	12	0.9690 11.628
ANGUILLA				CHINA	1	0.5651 0.565
ANTIGUA AND BARBUDA				COLOMBIA	17	0.7075 12.027
ARGENTINA	82	0.8897	72.958	COMOROS		
ARMENIA	6	0.6879	4.128	CONGO (DEM. REP.)		
AUSTRALIA	63	1.3958	87.936	CONGO REP	6	1.2258 7.355
AZERBAIJAN	5	0.6879	3.440	COSTA RICA	4	0.8913 3.565
BAHAMAS				CUBA	12	1.1503 13.804
BAHRAIN				DJIBOUTI		
BANGLADESH	10	0.9079	9.079	DOMINICA		
BARBADOS				DOMINICAN REPUBLIC	1	0.9184 0.918
BELARUS	2	0.6879	1.376	ECUADOR	7	0.8897 6.228
BELIZE				EGYPT	22	0.9349 20.568
BENIN	1	1.2258	1.226	EL SALVADOR		
BERMUDA				EQUATORIAL GUINEA		
BHUTAN	1	1.2258	1.226	ERITREA		
BOLIVIA	6	1.1504	6.903	ETHIOPIA	1	0.8057 0.806
BOSNIA AND HERZEGOVINA	10	0.5878	5.878	FIJI		
BOTSWANA	1	1.2258	1.226	GABON		
BRAZIL	143	1.1885	169.949	GAMBIA		
BRUNEI DARUSSALAM	1	0.8989	0.899	GEORGIA	13	0.6879 8.943
BULGARIA	67	0.3602	24.131	GHANA	2	0.7813 1.563
BURKINA FASO				GIBRALTAR		
BURUNDI				GRENADA		
CAMBODIA				GUATEMALA	1	0.8189 0.819
CAMEROON	4	0.9364	3.746	GUINEA		
CANADA	1	1.0144	1.014	GUINEA-BISSAU		
CAPE VERDE				GUYANA		
				HAITI		

HONDURAS				MONGOLIA	5	1.0616	5.308
HONG KONG	7	0.8094	5.666	MONTENEGRO	3	0.6193	1.858
INDIA	812	0.4663	378.653	MOROCCO	30	1.0495	31.486
INDONESIA	21	0.9898	20.786	MOZAMBIQUE			
IRAN	187	0.9887	184.891	MYANMAR			
IRAQ				NAMIBIA			
ISRAEL	63	0.9462	59.614	NAURU			
IVORY COAST				NEPAL	2	1.1674	2.335
JAMAICA	1	1.1639	1.164	NETHERLANDS ANTILLES			
JAPAN	223	1.1015	245.642	NEW ZEALAND	28	1.0703	29.969
JORDAN	3	1.0109	3.033	NICARAGUA			
KAZAKHSTAN	12	0.6879	8.255	NIGER	1	1.2258	1.226
KENYA	1	1.0917	1.092	NIGERIA	28	0.6456	18.077
KIRIBATI				OMAN	2	1.0420	2.084
KUWAIT	1	0.9528	0.953	PAKISTAN	160	0.6836	109.381
KYRGYZSTAN				PALAU ISLANDS			
LAOS	1	1.1975	1.197	PANAMA			
LEBANON	3	0.9845	2.954	PAPUA NEW GUINEA			
LESOTHO				PARAGUAY	1	0.7481	0.748
LIBERIA				PERU	24	0.7994	19.185
LIBYA				PHILIPPINES	79	1.0034	79.267
MACEDONIA	5	0.5878	2.939	PITCAIRN			
MADAGASCAR	7	1.2258	8.580	QATAR	1	1.0152	1.015
MALAWI				RUSSIA	346	0.5443	188.322
MALAYSIA	21	0.9696	20.361	RWANDA	13	1.2258	15.935
MALDIVES, ISLANDS				SAINT KITTS AND NEVIS			
MALI	1	1.2258	1.226	SAINT LUCIA			
MAURITANIA				SAINT VINCENT			
MAURITIUS	1	0.6738	0.674	SAMOA			
MEXICO	35	0.6707	23.476	SAO TOMÉ AND PRINCIPE, ISLAND			
MICRONESIA, FEDERAL STATES OF				SAUDI ARABIA	15	1.0924	16.385
MOLDOVA				SENEGAL			

SERBIA	12	0.6193	7.431	TURKEY	150	0.5078	76.171
SEYCHELLES				TURKMENISTAN			
SIERRA LEONE				TURKS AND CAICOS ISLANDS			
SINGAPORE	10	0.8364	8.364	UGANDA			
SOLOMON ISLANDS				UKRAINE	18	0.6197	11.154
SOMALIA				UNITED ARAB EMIRATES	5	0.9858	4.929
SOUTH AFRICA	33	1.1048	36.460	URUGUAY			
SOUTH KOREA				UNITED STATES	7	1.0400	7.280
SRI LANKA	12	0.7421	8.905	UZBEKISTAN	6	0.6879	4.128
SUDAN				VANUATU			
SURINAME				VENEZUELA	5	0.8663	4.332
SWAZILAND	2	1.1822	2.364	VIETNAM	14	1.1501	16.101
SYRIA	2	1.2258	2.452	VIRGIN ISLANDS, BRITISH			
TAIWAN	49	0.6695	32.807	YEMEN			
TAJIKISTAN	2	0.6879	1.376	ZAMBIA	1	0.6335	0.634
TANZANIA				ZIMBABWE	2	0.6335	1.267
THAILAND	21	0.6987	14.673	OTHER COUNTRIES	63	1.2258	77.224
TIMOR-LESTE				Total	9794		7,714.19
TOGO	1	0.7434	0.743	Handling charge			772.91
TONGA				Total estimate per issue			8,487.10
TRINIDAD AND TOBAGO							
TUNISIA	8	1.1143	8.914				