CYCLONE

Complete Dynamic Multi-cloud Application Management

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Dissemination and Communication Plan

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Executive Summary

CYCLONE is an Innovation Action, effective dissemination is especially important to ensure adoption of the CYCLONE developments during and after the project.

The CYCLONE platform will be built by integrating a number of components with existing developer and user communities. The goal is to allow these components to work seamlessly together, but without supplanting the identity, utility, or existing communities of the individual components.

Application Service Providers and Managed Service Providers are the primary target for the CYCLONE project, as these will directly use and benefit from the project's software. However, the project's communication efforts must also reach other audiences such as Cloud Service Providers, standards bodies, and the general public. Such diverse audiences require a diverse range of **communication channels** taking advantage of an outward-facing website, traditional media, and social media. The **branding strategy** must provide a consistent image of the project through all of these channels.

CYCLONE Dissemination and Communication Plan (DCP) includes a number of activities to inform community about the CYCLONE project, its activities and technologies. The DCP describes channels, mechanisms activities to deliver the main project messages to different target groups identified by the project.

Besides passive dissemination and communication methods, the DCP includes also (pro-)active methods to build future community of the CYCLONE technology adopters. The important role in this activity will belong to the project branding strategy described in the deliverable D2.1. The branding will convey the core ideas to all of its target audiences: agility, flexibility, confidence, and usage simplicity, with a focus on the core benefits of the CYCLONE software platform to Application Service Providers. Additionally, the CYCLONE brand will include a number of components that will be used internally by the project members and externally in all communications related to the project. Besides graphic elements assembled into templates, embedded into the published and web materials, the project software will also use the CYCLONE brand elements/logos/graphics. The common branding provided by the graphic elements and document templates will allow the project to project a common image through all of its chosen communication channels.

The DCP includes an initial plan for dissemination and communication activities, including publications, events organisation and attendance, which is based on existing partner network and involvement into research and professional community activity. Having such plan will allow building effective and coordinated project activity.

The presented document is an initial DCP that includes initial set of related activities and will be updated on yearly basis based on analysis of past activities, their effectiveness, including planning new activities, responding to new technology trends, suggestions from developer communities and demands from target user groups.

1. Introduction

Dissemination and Communication Plan (DCP) includes a number of activities to ensure CYCLONE awareness and impact on the community, its activities and technologies. The DCP describes channels, mechanisms activities to deliver the main project messages to different target groups identified by the project.

This document describes the Dissemination and Communication Plan (DCP) including the general approach, used mechanisms and proposed initial plan for publications, events organisation and attendance, which is based on existing partner network and involvement into research and professional communities activity.

The proposed report will define objectives and goals for dissemination activities, identify target groups, define dissemination and communication channels, tools and media to be used, and also define key messages that will be used to reach identified communities.

The proposed DCP will be used for building effective and coordinated project activities as well as creating wide awareness about project results. The creation of CYCLONE awareness will be also driven to create interest on end users willing to deploy additional use cases on top of CYCLONE platform.

By developing detailed DCP the CYCLONE project will intend extending its activity from passive communication to active engagement of the target communities and group into the project technologies and ecosystems adoption, testing, evaluation and development. This will allow building future community of the CYCLONE technology adopters and ensure the project results sustainability after the project ends.

The important role in this activity will belong to the project branding strategy described in the deliverable D2.1. The branding will facilitate conveying the core project ideas: agility, flexibility, confidence, and usage simplicity, to all identified target audiences/groups with focus on the core benefits of the CYCLONE software to Application Service Providers.

The presented document is an initial DCP that presents initial set of related activities and will be updated on yearly basis based on analysis of past activities, their effectiveness, including planning new activities, responding to new technology trends, suggestions from developer communities and demands from target user groups.

2. General Strategy

This chapter outlines the project objectives and exploitable results that will provide a context for all dissemination and communication activities and describe general principles that will guide the dissemination and communication planning of the CYCLONE activity.

2.1. CYCLONE Objectives and Exploitable Results

The following provides a short summary of the project objectives and exploitable results that will provide a context for the overall dissemination and communication strategy and all related activities.

The project will target the following objectives:

- Improve cloud services deployment in the Infrastructure-as-a-Service (IaaS) layer by integrating network services into the cloud offering, allowing direct control over virtual machine network accessibility, intra-site data access, and inter-site data transfers.
- Develop tools that provide enhanced functionality for cloud providers that agree to federate their resources, such as dynamic allocation of bandwidth between cloud providers and common authentication mechanisms.
- Provide tools that allow application developers to take advantage of features like VM coordination within deployments, automated placement of service components, and scaling of service components, essentially providing them with the means to develop a Platform-as-a-Service (PaaS) offering.
- Provide means to deploy and to manage easily the cloud based applications as a part of the Software-as-a-Service (SaaS) cloud systems.
- Provide software that allows developers to ensure the end-to-end, secure use of data within their application as well as secured access to remote data sources.
- Demonstrate that the CYCLONE software meets the needs of concrete academic and commercial use cases, while providing frequent, production-quality releases of that software.

The above objectives have been defined based on the partners' expert knowledge and understanding of the cloud technologies development trends. They address a number of deficiencies identified in current cloud platforms and deployment tools that create problems for application service providers and developers. CYCLONE objectives constitute the basis for targeting a wider range of potential user communities that may benefit from implementing the CYCLONE platform and its components:

- Distributed applications heavily rely on network services that in many cases need to connect different clouds and locations. However, the network features of most cloud infrastructures are rudimentary and not fully integrated with the other cloud management services.
- Control of network resources between cloud data centers (inter-cloud or bearer network infrastructure) through the standard cloud APIs is currently impossible.
- Application monitoring, deployment manipulation, auto-scaling, and network provisioning are critical for complex application management, yet these features are rudimentary or completely lacking from application deployment tools.
- Lack of a unified identity management scheme between cloud providers forces application service providers to manage a variety of credentials in suboptimal ways that reduce the security of the overall application deployment.
- Mechanisms for the secure, end-to-end management of sensitive data are not incorporated in either the cloud software or the application deployment tools.

2.2. Dissemination and Communication Goals

The DCP will guide the CYCLONE partner efforts to communicate the opportunities and benefits that can be derived from the project activities and outcomes. In this respect, main objectives for the dissemination and communication are:

- Ensure **continuous communication flows** starting from project launce date between the project consortium and the project target communities/groups: cloud application developers and providers, industry, big companies and SME, public sector, researchers, academic community.
- Ensure proper **awareness** amongst target groups about the CYCLONE.
- Develop and implement outreach activities targeted for main stakeholder groups and relevant communities.
- Pave the way for **sustainable exploitation** of CYCLONE outputs after EU funding period.

The design of the DCP is based on the following principles:

- Mapping the targeted audience segments to communication actions to be used and update them throughout the project;
- Coordination with the project partners' communication activities and use existing partner networks.
- Establish a clear roadmap of appropriate dissemination activities for the project in whole and for each partner.
- Manage a set of Key Performance Indicators (KPIs) to measure the progress of DCP activities.

2.3. Dissemination Strategy

The project primarily targets cloud based applications developers who create and operate applications on cloud infrastructures also called "Application Service Providers" or "Managed Service Providers". However, the project's dissemination efforts must reach a number of additional groups to maximize the visibility and impact of the project.

Diverse audiences require a similarly diverse range of communication channels. Consequently, CYCLONE will use a variety of methods to reach its target audiences. The main communication channels that will be used include:

- Project website (for internal and external communication), other forms of online presence
- Traditional Media
- Social Media
- Conferences, workshops and open tutorials
- Standardisation activity/bodies and professional/expert groups
- Special communication events

The dissemination strategy together with branding strategy must provide consistent messages through all of these channels to build a consistent image of the project and its benefits.

2.4. Exploitation Strategy

The CYCLONE platform will be built by integrating a number of components with existing communities of developers and users. The goal is to allow these components to work seamlessly together, but without supplanting the identity, utility, or existing communities of the individual components.

In keeping with this, the planned, post-project exploitation of the CYCLONE results will primarily be through the continuing activities of the developer and user communities of the individual components. The

CYCLONE project will provide significant added value to the individual components developed and maintained by partners. It is expected that each partner will continue promoting and exploiting their components, improved during the project lifetime, to their existing and future users, at the same time promoting the general CYCLONE framework and developed tools.

Detailed exploitation plan by partners can be found in the CYCLONE DOA document that explains what specific exploitation actions were planned by partners using their own networks. Results of dissemination and exploitation activities will be reported yearly together with updated planning for next period.

2.5. Branding

The branding is an important part of the project's dissemination and communication activity. The CYCLONE branding strategy has been described in the deliverable D2.1 [1]. Branding will provide a consistent, recognizable project identity realized through different communication channels. The brand identity will convey the core benefits of the CYCLONE software to Application Service Providers:

- Ease of deployment of complex (multi-)cloud applications
- End-to-end application security
- Flexible (re-)configuration of application resources
- On-demand, advanced network configuration.

In more general terms, the branding should convey the core CYCLONE product advantages to all target user groups: agility, flexibility, confidence, and usage simplicity.

2.5.1. Brand Identity elements

The CYCLONE brand identity must provide a common "look & feel" for all of the project's communications and a logo that will be instantly identified with the project and with the projects goals and ideals.

The project has developed the necessary graphic elements that will be used for branding identity (see Appendix A for graphic materials:

- Logo (available in different formats and sizes
- Favicon to appear in the URL line of web browsers
- Common color scheme
- Specific fonts for various document elements.

The graphic elements need to be assembled into templates to ensure that the project participants can easily follow the recommended styles. The templates that are required are:

- Word template for press releases
- Word template for a newsletter
- Word template for flyers
- PowerPoint presentation template
- Word template for articles
- Word template for deliverables
- Poster template.

To maximize the visual impact of the dissemination materials and to ensure that they convey a sense of quality to the target audiences, professional graphics designers from Interoute have been involved to develop both the graphic elements and document templates.

Template examples for PowerPoint presentations and for flyers are provided in Appendix A, other will be developed as DCP will progress and new project materials will be developed.

2.5.2. Co-branding

The CYCLONE project will adopt co-branding approach where the CYCLONE brand will be used in parallel with the branding of the individual components for the duration of the project. As the CYCLONE branding will be used to identify what software components are part of the CYCLONE solution, it is important that the websites and other communication channels of the individual components clearly identify themselves as part of the CYCLONE project, providing crosslinks back to the project (e.g. links back to the CYCLONE website, following on Twitter, etc.). Similarly, the CYCLONE media should also provide prominent links to the individual components.

The co-branding scheme should allow the project participants to decide during the project whether to continue using the CYCLONE brand (and coordinated exploitation) or use their own product brands acknowledging CYCLONE contribution or belonging to anticipated created at that time CYCLONE ecosystem.

The project will consider creating a sign or logo of association with project like “Part of CYCLONE”, “Member of CYCLONE” or “CYCLONE group”.

3. Target Communities and Messages

This chapter provides an initial list of target communities that will benefit from the CYCLONE activities and the messages that the project must communicate to those communities. The project will identify new communities and refine the messages over the course of the project. In addition, the project will build up its own community as people from these target communities become aware of the advantages of CYCLONE and become active users of the software, potentially also contribution to platform development.

3.1. Research Community

3.1.1. Application Service Providers (Research community)

Admitting the origin of the main CYCLONE tools SlipStream, StratusLab and OpenNaaS from the research community, the project will target the Application Service Providers from this community as one of the major target user/customer group. Typically, research projects and research applications require multiple cloud resource integration both from public clouds and private clouds. They usually integrate custom scientific or engineering analysis software with other (commercial or open source) software, such as database implementations. They often have large data sets to manage that also need to be integrated together with related scientific data management tools.

The primary messages for this group of users are:

- CYCLONE provides a complete cloud application framework that frees them from re-implementing common features, such as authentication and authorization, and provides advanced features for application, network, and data management. The improvements they see are:
    - Faster implementation of applications
    - Less code to maintain
    - More efficient, robust services
- The CYCLONE components are released under liberal open source licenses that encourage the reuse and creation of derivative works
- These developers are welcome to contribute and join the CYCLONE development efforts to improve or to expand the CYCLONE software components.

The project also will target commercial Application Service Providers which profile and messages are discussed under cloud industry target groups.

3.1.2. European Research Infrastructures

There are numerous European initiatives that involve the collection, analysis, and dissemination of scientific data. These initiatives use and deployment of heterogeneous computational platforms for performing their data analysis and dissemination tasks. Most of these platforms are cloud-based or include cloud technologies and are good candidates for incorporating the CYCLONE software. The first focus for such European research infrastructure projects will on the projects HelixNebula, Elixir, and the European Grid Infrastructure (EGI) that recently deployed European wide Federated Cloud Infrastructure[1].

In addition, an increasing number of research groups federate their own computing resources with institutional or commercial cloud resources to run their applications. CYCLONE components can be used to simplify this federation while providing advanced network configuration to deliver efficient access to remote data.

[1] [1] European Grid Initiative - http://www.cyclone-project.eu/

The primary messages for these infrastructures are:

- CYCLONE provides an open application framework that will simplify the development, deployment, and management of their scientific applications
- CYCLONE can provide advanced federation of cloud infrastructures allowing applications to reach larger scales and access remote data efficiently
- The CYCLONE software components can be easily offered on their infrastructures to their users without royalties and without significant constraints on reuse
- CYCLONE as a project would welcome demonstrations of its software using applications on these infrastructures, providing the information, tutorials, and support necessary to do those demonstrations.

3.1.3. Cloud Projects

CYCLONE is not the only European or national project that develops tools for cloud application development and deployment. CYCLONE will intend to reach out to similar European or national cloud projects to investigate possible collaboration and interoperability to benefit from wider user community.

The primary messages for this group of users and adopters are:

- CYCLONE is open for discussion about the best techniques and interfaces for implementing the various features within the CYCLONE project's scope
- The developer community is open to contributions from people outside of the project, providing those contributions are consistent with our liberal open source licenses
- CYCLONE is willing to provide technical demonstrations and tutorials to inform other projects about our software
- Where interoperability exists (either because of standards or common interfaces), the project is willing to participate in events with other projects demonstrating interoperability.

3.1.4. Cloud End-users

End-users of cloud applications and cloud infrastructures would benefit indirectly from the CYCLONE software implemented by application providers by having access to more robust and secure application cloud platform and infrastructure. The advanced networking features may also allow more rapid access to remote data, making their analyses more efficient.

The primary messages for cloud end-users are:

- CYCLONE applications integration platform can provide more secure and trustworthy cloud platform for data communication, processing and storing in heterogeneous cloud based applications.
- Easy multi-cloud integration allows the easy deployment of redundant services, improving the availability of their applications
- Advanced networking configurations facilitated by CYCLONE Network as a Service (NaaS) allows more efficient access to remote data sets, speeding and improving scientific analyses.

Although these users benefit indirectly from CYCLONE, they may be influential in the adoption of the CYCLONE software by pushing Application Service Providers or research infrastructures to adopt CYCLONE software.

3.2. Cloud Industry

3.2.1. Managed Cloud Service Providers

Managed Cloud Service Providers and Cloud Service Integrators are companies that provide high-level, managed services to the public or specific user communities that may also include multiple cloud resources integration and corresponding applications infrastructure operation. Their added value consists of the knowledge of deploying and managing specific applications, freeing the users of their service from all of the operational aspects of the service.

These are the commercial analogue of the Application Service Providers in the research community. They include application developers who create customized applications for a particular business sector as well as companies that simply assemble high-level applications from pre-existing open source or commercial components.

The messages are similar the Application Service Providers:

- CYCLONE provides a complete cloud application framework that frees them from re-implementing common features, such as authentication and authorization, and provides advanced features for application, network, and data management. The improvements they see are:
    - Faster implementation of applications
    - Less code to maintain
    - More efficient, robust services
- The CYCLONE components are released under liberal open source licenses that encourage the reuse and creation of derivative works.
- These developers are welcome to contribute and join the CYCLONE development efforts to improve or to expand the CYCLONE software components.

3.2.2. Cloud Service Providers

Cloud Service Providers are companies that provide cloud resources (primarily at the “Infrastructure as a Service (IaaS)” level for CYCLONE) to the public or specific user communities. They can benefit by offering the CYCLONE tools and services in addition to their usual offerings. They could also take advantage of CYCLONE’s federation capabilities by linking resources from other regions or from other providers.

These are the commercial analogues of the European Research Infrastructures, with the same messages:

- CYCLONE provides an open application framework that will simplify the development, deployment, and management of their scientific applications
- CYCLONE can provide advanced federation of cloud infrastructures allowing applications to reach larger scales and access remote data efficiently
- The CYCLONE software components can be easily offered on their infrastructures to their users without royalties and without significant constraints on reuse
- CYCLONE as a project would welcome demonstrations of its software using applications on these infrastructures, providing the information, tutorials, and support necessary to do those demonstrations.

3.3. Others

3.3.1. Standardisation Bodies

Standardisation is a key factor in cloud and inter-cloud interoperability and sustainable deployment. There are many industrial and academic organizations that develop and propose standards related to cloud technologies and services. Some of these may be relevant for the services that will be developed or improved through the CYCLONE project.

CYCLONE partners has experience in working with standardisation bodies and will commit efforts of the project liaison with key standardisation bodies in cloud computing such as NIST, Open Grid Forum, TeleManagement Forum and IETF. The project will intend to deliver the following messages:

- Technical and user review on standards that are considered (whether adopted or not)
- Information about standards adoption, implementation experience and improvement recommendation
- Demonstrations of interoperability between the CYCLONE implementation of adopted standards with other implementations.

3.3.2. Academic users and professional training

Use of cloud services and applications in academic education and professional training should not be underestimated. Introducing CYCLONE products as an example of the widely used cloud deployment and integration tools will create awareness and may motivate future graduates to use these tools at their future workspace.

The typical way of delivering information about the CYCLONE benefits to academic users, master and PhD students would be the guest lectures and tutorials that can be offered as a part of ongoing cloud or Big Data courses. Additionally the students may perform their master thesis research under supervision of the project members.

The primary messages for cloud end-users are:

- CYCLONE software and products propose an alternative to widely used but narrowly oriented cloud integration tools such as Chef or Puppet for AWS, and Azure cloud management software
- CYCLONE provides implementation of the generic inter-cloud services deployment platform that can integrate both custom resources or platforms and popular public cloud platforms AWS and Microsoft Azure.

3.3.3. General Public

The general public will be positively impacted by the CYCLONE developments, although probably only indirectly. Nonetheless, they need to be informed about how the project benefits them.

The main messages for the general public are mainly explanations of the indirect benefits of the project for them including:

- Improvements to the security and robustness of cloud-based applications that they use
- Greater diversity of applications by allowing developers to concentrate on the creative aspects of their applications rather than the “plumbing”
- Larger, more dynamic economic market in the cloud sector, providing more tax returns and employment.

3.3.4. Funding Agencies

The CYCLONE project is funded directly by the European Commission with additional funding from national funding bodies or the participating institutes. All of these organizations must be kept abreast of the CYCLONE developments and how they impact the other target communities. With this information these institutes can judge the effectiveness of their investments in the project.

4. Communication Channels

4.1.1. Public Website

The project website is the main tools to communicate information about the CYCLONE project and its activities to wide community. The project website will be used to reach the identified target audiences and inform them about CYCLONE developments and activities that are of potential interest for them. The project will use best practices and modern technologies in website design and management to be attractive to visitors, potential users and provide clear, consistent messages tailored for different target audiences.

At the time of writing this deliverable the initial version of the project website is operational and available at URL

http://www.cyclone-project.eu/

The website is designed to prominently display the project's logo and other aspects of the CYCLONE "look & feel", such as the color scheme, fonts, etc. Although the details may need to be adapted for the web, the overall theme must be similar enough to the other communication channels to make an instant visual connection with other project communications.

The main website sections include:

- Frontpage containing two main sections:
    - Project introduction linking related document and pages about project goal, objectives, target communities and consortium members
    - New section and social media links (in particular LinkedIn and Twitter)
- Subordinate pages providing information on
    - News
    - Consortium information and contact
    - Deliverables
    - Software
    - Press
    - Imprint

Activity on the website will be monitored via Google Analytics. This will allow the project to better understand who visits the website, how the visitors proceed through the website, and if other CYCLONE events (such as conference presentations or tutorials) affect the number of visitors.

The project website will also serve internal consortium purposes to assist consortium members' individual dissemination activities and rising awareness about CYCLONE related activities to their own network. Internal project website will be kept separate from the public website and will common collaborative tools such as wiki, file sharing or document management system.

Appendix A provides few screenshots of the CYCLONE website (initial version) that illustrate the website structure and the project dissemination and communication tools: news section, social media links, information for press, and CYCLONE software products information.

4.1.2. Traditional Media

Traditional media and contribution to different project related events still play a vital role in dissemination activities and collecting information from target communities. For CYCLONE this will include information targeted at the technical and nontechnical press as well as people active in the IT sector.

Materials will be prepared regularly for the press, including press releases for important events, standard descriptions of the project, flyers including important results, regular newsletters, and white papers. The project participants must be open to interviews or briefings with journalists to put human faces on the project achievements. The project will use the communication officers from each partner and existing partner network to expand the reach of the CYCLONE dissemination efforts via the traditional media.

To reach people in the IT sector, the project will present its results at scientific and industrial cloud conferences, publishing related journal articles as appropriate. The project must identify the primary academic and industrial conferences to reach people in the IT sector effectively. In addition, the project should offer tutorials regularly at appropriate events to ensure that people in the IT sector understand in detail the benefits of the CYCLONE software.

The types of materials (and templates) that will be produced include:

- Press releases
- Informational flyers
- Newsletters
- Standard project presentations
- Articles in press and media
- Personal communications/email

The effectiveness of these activities will be monitored directly by counting references to the project in the press and the number of attendees at tutorials. Other methods, such as increases in website or social media activity correlated to press releases, will provide an indirect measure of the effectiveness of these efforts.

List of initial planned actions and activities is provided in section 5.

4.1.3. Social Media

A social media presence allows the project to take advantage of active user and professional communities present in social networks and easy link existing partner networks to the CYCLONE social media accounts. Using social networks allows the project to reach a large group of people nearly instantly while support constant awareness about CYCLONE among created groups of followers and subscribers.

However dynamic nature of the social media processes and discussions requires a regular feed of news items, project activities update and participation in different networking activities and campaigns. This will require dedicated efforts by the project to ensure that our social media accounts active and has constant or growing number of followers. Based on evaluation of impact of different social media and required efforts, the project has decided to limit the number of social media accounts and activities to LinkedIn and Twitter:

- H2020 CYCLONE LinkedIn group
  LinkedIn represents the professional community and allows creating interest groups
- @H2020_CYCLONE Twitter account
  Twitter that offers the most dynamic way of communicating project news and cross-posting relevant news items building in this way wider awareness about CYCLONE; it is anticipated that twits should be supported with actual information published at the project website or publications about project in other media.

The project partners will follow, share and re-post items created on the CYCLONE social media accounts with their own network to extend the reach of the messages and amplify their impact.

Maintaining social media accounts will serve also branding purposes by using the CYCLONE logo or icon to ensure consistency with the rest of the project's communications.

To monitor the effectiveness of these communications, the number of followers or group members will be tracked over time. The activity on the social media accounts will be monitored using a popular marketing tool called HubSpot. This tool will enable the consortium to create campaigns and effectively understand the dissemination data via clear reports. This will allow the partners to focus on the channels and groups that work best. In addition, the number of views of our entries in the social media will be tracked to see how popular are CYCLONE trends or groups.

4.1.4. Partner networks

Existing partner networks will create another effective channel for the project results dissemination, building awareness about the CYCLONE benefits and creating adopters and contributors community. The following partner network types will be used and targeted by CYCLONE:

- National and international media companies
- Governmental contacts and NGO networks
- Technology and industry forums, including Open Source development groups/community
- Research and industry associations (e.g. TERENA/GEANT association)
- Advisory boards (research and industry)
- Big companies (cloud providers, application service providers, software vendors)
- SMEs with which project partners maintain cooperative relations, potential adopters and/or contributors.

4.1.5. Publications, conferences and workshops

Publishing research and technical papers has strong long-term impact on the project results awareness and adoption, however this can be treated as rather a passive way of communication. Presenting papers at scientific conferences or industry conferences and events has benefits of active discussion with the conference attendees from multiple research and technical domains that may represent users, developers and providers as well as other target group representatives:

- Understanding user needs will help to improve the CYCLONE products and add new features
- Talking to developers will help to understand new trends and technologies that can be used in the project developments as well as to establish cooperative contacts and possibly contributors
- Communicating with providers will help to understand their needs, alternatives and competitive solutions and consequently adopt the project marketing and exploitation strategy.

Table 4.1 contains list of conferences, workshops, European research community and industry events that are of primary focus for the project dissemination and communication activity.

Conference/ workshop **Periodicity** **Location**	**Current/planned partner contribution**	**CYCLONE messages to be conveyed**	**Impact/ community**
IEEE Workshop on Cloud Computing, Interclouds, Multiclouds, Federations, and Interoperability, in conjunction with the IEEE International Conference on Cloud Engineering (IC2E) Annual Europe, USA	Intercloud workshop co-organised by UvA in 2014 and 2015, planned for 2016	Multi-cloud services integration and automation, cloud federation	15-30 submissions, 150-250 IC2E conference attendees
NetCloud Workshop, in conjunction with IEEE CloudCom conference Annual Europe, North America, Asia Pacific	NetCloud workshop co-organized by UvA and I2CAT (2011, 2012, 2013) Planned for 2015	CYCLONE general architecture, security architecture, tools, cloud network services	One of top ranked conferences, 150-300 attendees, regionally focused Europe, North America, Asia Pacific
TERENA Networking Conference (TNC) Annual Europe	Multiple forms of contribution: papers, posters, BoF, lightning talks, demo	CYCLONE architecture, tools, services	Key European networking community event, 400-700 attendees
European Grid Initiative (EGI) Forum Twice a year Europe	Working group contribution, presentations, BoF, posters	CYCLONE architecture, tools, services	200-300 attendees from the native to CYCLONE European research community
Research Data Alliance (RDA) Plenary meetings Twice a year Europe, USA	Interest and Working contribution, posters	CYCLONE tools for data centric cloud based infrastructure integration	400-700 research community representative with growing interest to infrastructure services enabling research data infrastructure

Conference/ workshop Periodicity Location	Current/planned partner contribution	CYCLONE messages to be conveyed	Impact/ community
Cloudscape Annual Brussels, Belgium	Presentation, poster, demo	CYCLONE concept, development, tools, community access	70-150 attendees from EU research community, industry, FP7/H2020 projects
Cloud Expo Europe Annual	Exhibition booth, presentations	CYCLONE concept, development, tools	European cloud industry
EuroCloud Symposium Annual	Presentations, panels, exhibition	CYCLONE architecture, tools, services	150-250 attendees from European Cloud Industry
SC – Supercomputing conference and exhibition Annual USA	Booth, paper, poster, tutorial	CYCLONE architecture, tools, services	5000-6000 visitors from around the world, research and industry

Table 4-1: Conferences, workshops organized by the CYCLONE partners and target conferences for partners dissemination activity

4.1.6. Standardisation activity and contribution to SDO

Standardisation is an important channel and tool to promote project results and secure its products adoption on a longer time period. Standardisation typically involves industry experts and representatives from provider community, developers, major industry companies and have strong impact on the technology adoption.

The project will use current partners' involvement into standardisation activity and particular Standard Development Organisations (SDO) to achieve the CYCLONE visibility, influence standards development, communicate with the industry experts, and have access to new emerging technologies.

The following Table 4.2 lists the target standardisation bodies where CYCLONE will focus its DCP activity.

SDO	Partner involved	Current/planned partner contribution	Relevance to CYCLONE	Impact/ community
NIST	UvA	Contribution to Cloud Computing WG (2011-2014) Big Data WG (2013-now)	Cloud architecture, cloud services management, cloud infrastructure for data centric services	Whole cloud industry, other IT sectors
IETF	UvA	Contribution to Internet Draft "Cloud Reference Framework"[3]	Defines the Intercloud Architecture Framework (ICAF) which includes Intercloud Federation Framework (ICFF) to adopted by CYCLONE	Wide, whole Internet, communication, computing industry
OGF	UvA	Infrastructure Services On Demand Research Group (ISOD-RG) ISOD BCP published in 2014 [4] Ongoing contribution to NML and NSI development	ISOD BCP defined a roadmap for Intercloud interoperability and role of Cloud Carrier. NSI protocol provides a basis for controlling multi-domain intercloud network infrastructure (potentially to be implemented in OpenNaaS)	Limited but devoted community, in particular GEANT community
IEEE	UvA	IEEE P2302 Intercloud Standards Working Group	Multi-cloud, Intercloud services federation Intercloud Testbed Initiative	Industry and wider developers community
TMF	UvA	Affiliate University member. Follow standards development, use in research and education	Cloud/multi-cloud services deployment, management and operation	Telecom industry, emerging cloud IaaS providers
CSA	SixSq, UvA	Follow standards development, contribute, use in research and cloud education (UvA)	Cloud security, Big Data security, federated security services	Whole cloud industry, research community

Table 4-2: Target Standard Development Organisations (SDO) and suggested CYCLONE contribution

5. DCP implementation: Initial activities plan

This section provides information about planned initial CYCLONE dissemination and communication activities for the duration of the project and for the first project year based on dissemination and communication channels identified in the previous section. At the end of the first year the project will provide annual report on the dissemination activities and updated plan for the following year.

5.1. Website operation and improvement

The currently operational initial version of the project website (visit http://www.cyclone-project.eu/) will undergo continuous improvement in two main directions:

- Content and presentation improvement
    - Implementing modern design and best practices in content management
    - Content and presentation improvement following feedback from visitors
- Increase awareness about the CYCLONE activities and results by regular project and related news update
    - Regularly publish updates on project activities including planned events, project presentations, conference attendance
    - Publish other information on events and external news of potential interest for project members and target communities, e.g. conferences, technical news, standardisation activities, partner news, etc.
- Add elements of the community engagement such as subscription to the project newsletters, linking to project and forum at LinkedIn, Twitter following

The results of the continuous website improvement will be measured by the visitors statistics taking into account both number of visitors and their geographical coverage.

5.2. Dissemination materials and branding

During the first year CYCLONE will develop and improve the main components of CYCLONE brand and implement them in its dissemination and communication activity using identified channels such as traditional media, social media and partner networks.

The following dissemination materials will developed and produced:

- CYCLONE leaflet introducing the project concept, objectives and products (see Appendix A for leaflet prototype)
- CYCLONE newsletters summarising the project's activity in the first year to be produced in the fourth quarter 2015 (with following newsletters produced at least twice a year)
- CYCLONE poster to be produced for the first conference or event where the project will be presented (see section 5.3 for initial events suggestion)

- Other materials such as CYCLONE folder, stickers, bags, T-shits will be considered for the events where it be considered to have significant impact on the awareness about the project.

All above mentioned materials will use the main components of the CYCLONE brand such as logo, templates, styles as well as specifically crafted messages for reaching different target communities.

The project will use different channels to deliver necessary messages where important roles will belong to social media and network, first of all LinkedIn and Twitter where the project has created accounts and will work on growing community of followers.

5.3. Planned conferences and other events attendance

Table 5.1 below contains list of suggested events and conferences where CYCLONE will intend to be presented, although subject to submission or application to be accepted. The table contains events where the project members can attend to talk to target communities and distribute dissemination materials (such as industry conferences or exhibitions, H2020 events) and where the project can presented a poster or paper which will be published online or in the conference proceedings.

Other opportunities to submit papers or present project results at different conferences and event will be actively searched and used by the project partners. Summary of such activities will be reported in annual dissemination and communication report as updates to current deliverable

The table also contains events that project members have attended until 30 March 2015 where CYCLONE partners have been presented and made first presentation of the project and distribution of the project leaflet which first version has been prepared.

Date (Month/Year)	Event, place	Planned partner contribution	Target community
9-10 March 2015	Cloudscape VII Brussels, Belgium http://www.cloudscapeseries.eu/Content/DemosAndPosters.aspx?Cat=0!20	SixSq (C.Loomis) Demo [4]	EU cloud research community and industry, FP7/H2020 projects
11-12 March 2015	Cloud Expo Europe 2015 London, UK URL: http://www.cloudexpoeurope.com/	SixSq (C.Loomis) Exhibitor SlipStream, Helix Nebula Marketplace [5]	European cloud industry
12 March 2015	IEEE Workshop on Cloud Computing, Interclouds, Multiclouds, Federations, and Interoperability, in conjunction with the IEEE International Conference on Cloud Engineering (IC2E) Tempe, Arizona, USA	UvA (Y.Demchenko) • Paper presentation [6] • Panel on Intercloud projects and implementation	Cloud services and infrastructure researchers and developers, researchers from big companies.

	URL: http://www.intercloudtestbed.org/intercloud2015.html		
25 March 2015	3rd CloudWATCH Concertation meeting at Net Futures 2015 conference. Brussels, Belgium URL: http://www.cloudwatchhub.eu/turning-cloud-research-innovative-software-services	I2CAT (E.Escalona, J.I.Baranda)	Majority of EU FP7 and H2020 cloud projects (part of EC Unit E2 Software Services and Cloud)
18-22 May 2015	European Grid Initiative (EGI) Forum Lisbon, Portugal URL: http://www.egi.eu/news-and-media/newsfeed/news_2015_005.html	Poster/demo presentation, dissemination materials distribution, talking to target user groups from European research community	European research community, Grid and cloud research infrastructure
15-18 June 2015	TERENA Networking Conference (TNC2015) Porto, Portugal URL: https://tnc15.terena.org/	Poster presentation, dissemination materials distribution, talking to target user groups from European research community	European research networking community, GEANT and NREN cloud projects
15-17 June 2015	Track CDCGM2015: Convergence of Distributed Clouds, Grids and their Management, as part of The 24th IEEE WETICE 2015 Conference Larnaca, Cyprus URL: http://cdcgm.dieei.unict.it/	Accepted paper, presentation Regular dissemination activities	Cloud and Grid Research community
15-20 November 2015	SC15 – Supercomputing conference and exhibition Austin, Texas, USA URL: http://sc15.supercomputing.org	CYCLONE product presentation, poster (only as part of the partner booth)	Cloud, HPC, Big Data research and industry worldwide
30 Nov – 3 Dec 2015	4th NetCloud Workshop, in conjunction with IEEE	Workshop organisation, paper	Cloud infrastructure and

	CloudCom conference Vancouver, Canada URL: http://2015.cloudcom.org/	presentation, panel organisation. Dissemination materials distribution, talking to target user groups	services researchers and developers, cloud industry, standardisation bodies
Autumn 2015	EuroCloud Symposium URL: TBA	Paper, poster, panel contribution	European Cloud Industry
February - March 2016	Cloudscape VIII Brussels, Belgium URL: TBA	CYCLONE Poster, demo, presentation. Dissemination materials distribution	EU cloud research community and industry, FP7/H2020 projects
12-13 April 2016	Cloud Expo Europe 2016 London, UK URL: http://www.cloudexpoeurope.com/	Attendance, market research. Dissemination materials distribution, talking to target user groups.	European cloud industry
April 2016	IEEE Workshop on Cloud Computing, Interclouds, Multiclouds, Federations, and Interoperability, in conjunction with the IEEE International Conference on Cloud Engineering (IC2E) Berlin, Germany UR: TDA	Workshop organisation, paper presentation, panel organisation.	Cloud services and infrastructure researchers and developers, researchers from big companies.

Table 5-1: Planned conferences and other events attendance and contribution by CYCLONE partners for 2015-2016 period

6. Conclusions

The presented Dissemination and Exploitation Plan (DCP) targets to support the main CYCLONE objectives to develop a set of tools to make heterogeneous multi-cloud services integration and deployment easy and extend them with the possibility to integrate network services into the cloud offering and allow direct control over inter-cloud network connectivity and data transfer, also adding access control and trust management for deployed cloud infrastructures and services. The project is using software and tools developed by partners which will be integrated and improved during the project development with additional functionalities and abilities to address selected use cases and more general requirements from identified user groups, first of all, cloud Application Service Providers. The project will rely both on the consortium activity to develop new CYCLONE tools and ecosystem and on the coordinated partner activities on continuous development of their original software products and tools.

The presented in this deliverable DCP will guide the project partner efforts to communicate the opportunities and benefits of the project results and products. The main objectives for the dissemination and communication are establishing reliable communication channels with different target groups: cloud application developers and providers, industry, big companies and SME, public sector, researchers, academic community. The final goal of this activity will be to ensure sustainable exploitation of the CYCLONE results after EU funding period. This can be achieved by gradual evolution of the project relations with the target user and adopter groups from awareness to engagement and contribution to the CYCLONE platform development by CYCLONE adopters.

The project will use the public website, traditional media, social media (LinkedIn and Twitter) to communicate with the project's target audiences. The effectiveness of these communications will be monitored via automated tools available online and from social network services.

Branding is an important part of DCP and it will be consistently addressed through all dissemination and communication activities. The branding strategy has been defined from the project beginning and documented in the deliverable D2.1 (M2).

This deliverable defines a number of initial activities for the first project year to gradually build CYCLONE network and community and create awareness about the project activities that include the project website, set of dissemination activities and suggestions for using social media. The report contains a list of suggested events and conferences where CYCLONE can be presented. This includes events where the project members can attend to talk to target communities and distribute dissemination materials (such as industry conferences or exhibitions, H2020 events) and where the project can present a poster or paper which will be published online or in the conference proceedings.

The presented DCP will be yearly reviewed based on the ongoing dissemination and exploitation results and updated plan will published as update to this deliverable.

7. References

1. CYCLONE Deliverable D2.1 Branding Strategy
2. Cloud Reference Framework. Editor Bhumip Khasnabish, Contribution by Yuri Demchenko, Internet Draft, 7 October 2014 [online] https://tools.ietf.org/html/draft-khasnabish-cloud-reference-framework-07
3. GFD-CP.208, On-Demand Infrastructure Services Provisioning Best Practices. OGF Community Practice Document. [online] http://ogf.org/documents/GFD.208.pdf
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5. SlipStream SaaS and Helix Nebula Marketplace, SixSq showcase at Cloud Expo Europe. [online] http://www.cloudexpoeurope.com/Exhibitor/SIXSQ
6. Open Cloud eXchange (OCX): A Pivot for Intercloud Services Federation in Multi-provider Cloud Market Environment, in Proc. IEEE 4th International Workshop on Cloud Computing Interclouds, Multiclouds, Federations, and Interoperability (Intercloud 2015), March 12, 2015, Tempe, USA

8. Abbreviations and Definitions

8.1. Definitions

No specific definitions are introduced in this document.

8.2. Abbreviations

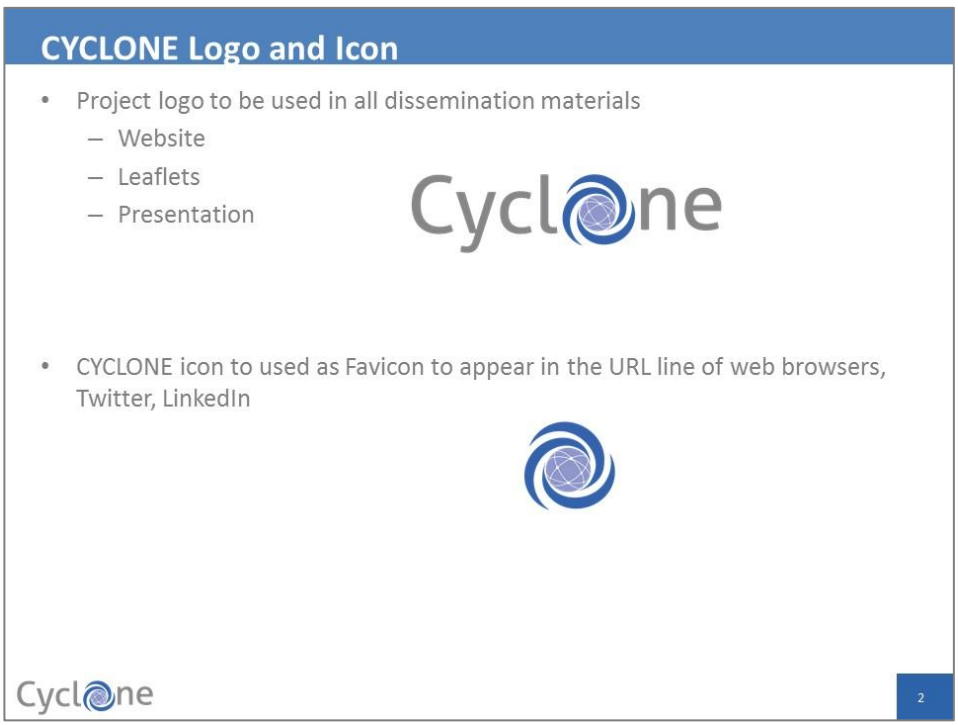
CSA	Cloud Security Alliance
DC	Data Center
DMTF	Distributed Management Task Force
E2E	End to End
EGI	European Grid Initiative
IaaS	Infrastructure-as-a-Service
IPR	Intellectual Property Rights
IT	Information Technology
IEEE	Institute of Electrical and Electronic Engineers
IETF	Internet Engineering Task Force
NaaS	Network-as-a-Service
NIST	National Institute of Standards and Technology (USA)
OGF	Open Grid Forum
PaaS	Platform-as-a-Service
PoP	Point of Presence
RDA	Research Data Alliance
SaaS	Software-as-a-Service
SDN	Software Defined Networks
SDO	Standard Development Organisations
SN	Social Network
SP	Service Provider
TCTP	Trusted Cloud Transfer Protocol
TMF	TeleManagement Forum
TNC	TERENA Networking Conference

Appendix A CYCLONE Style and branding elements

This appendix provides example of the CYCLONE presentation template and CYCLONE leaflet layout.

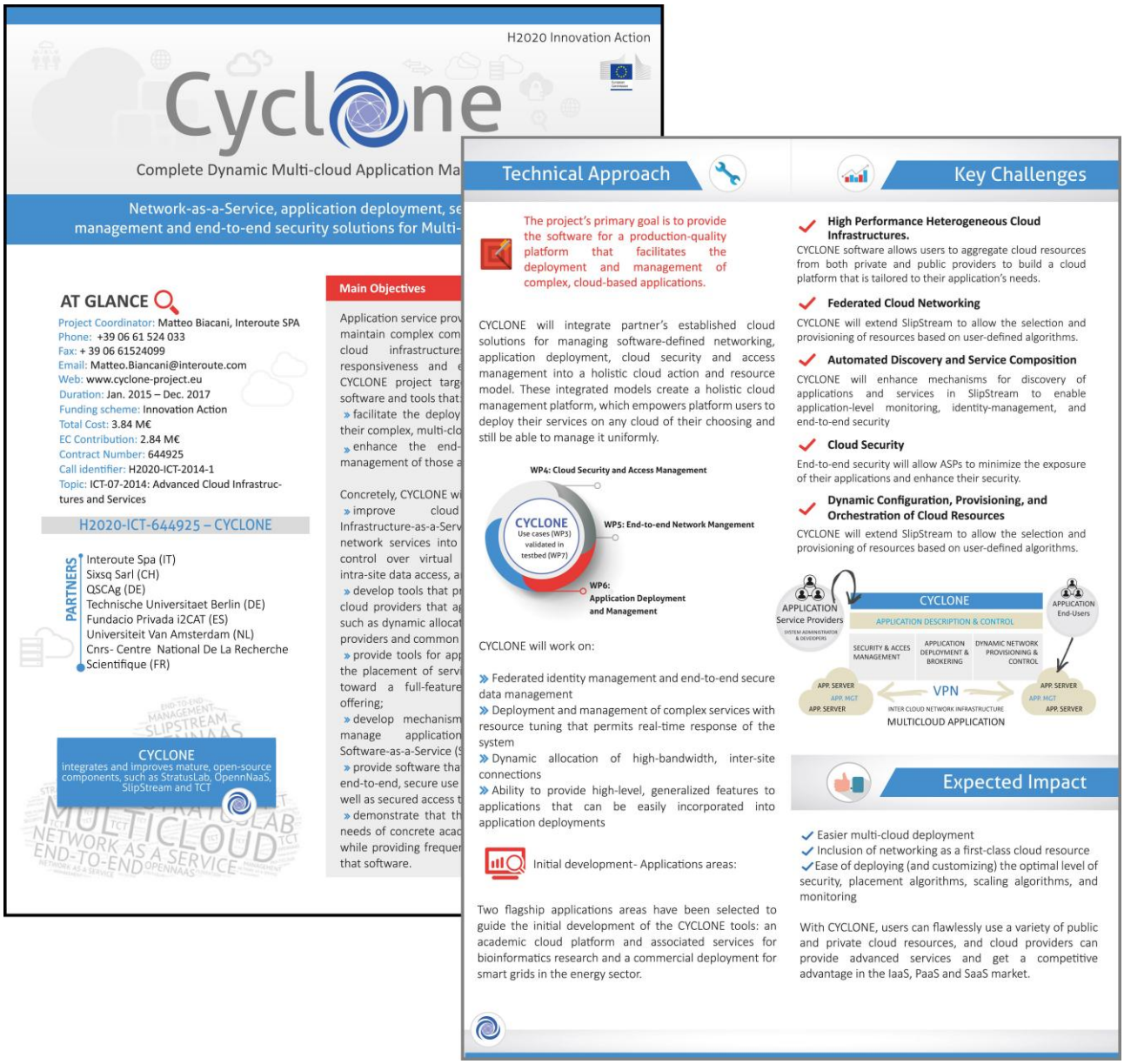
A.1. CYCLONE Power Point presentation template

1) Presentation title page



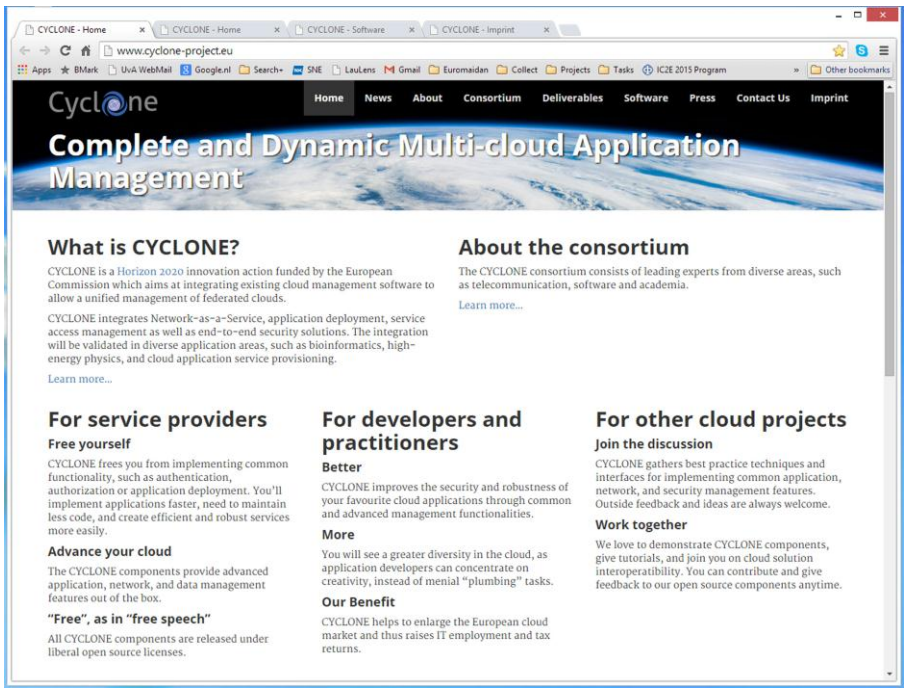
2) Presentation slide containing CYCLONE logo and icon.

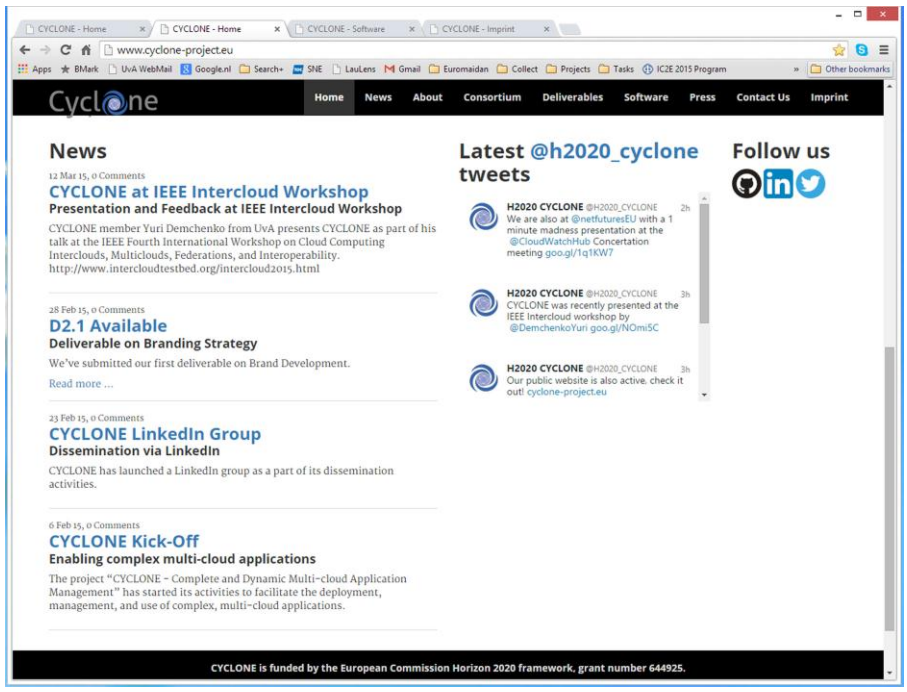
A.2. CYCLONE leaflet layout



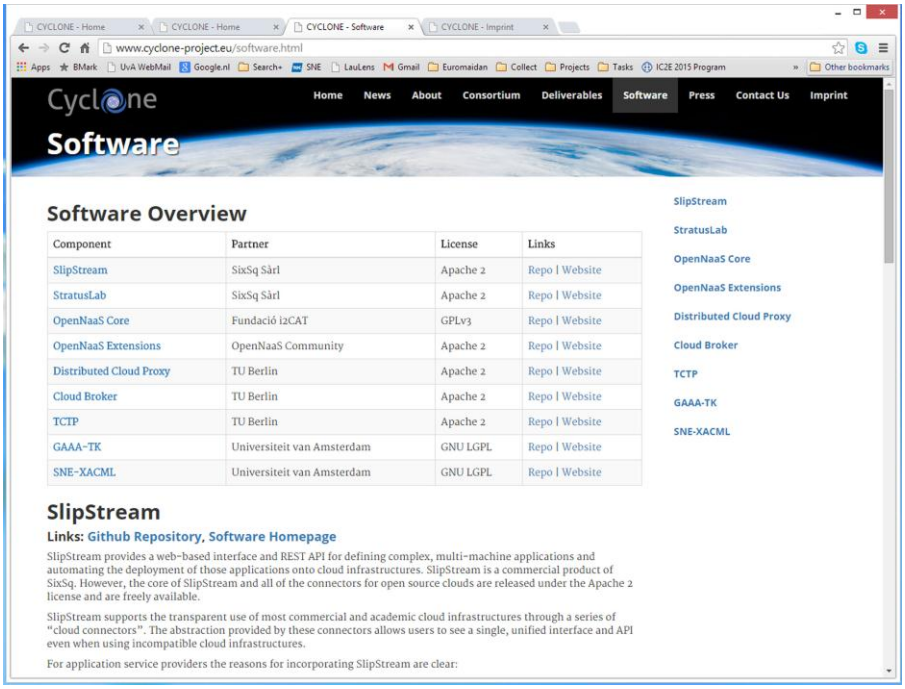
Appendix B CYCLONE website screenshots (version 1.0, March 2015)

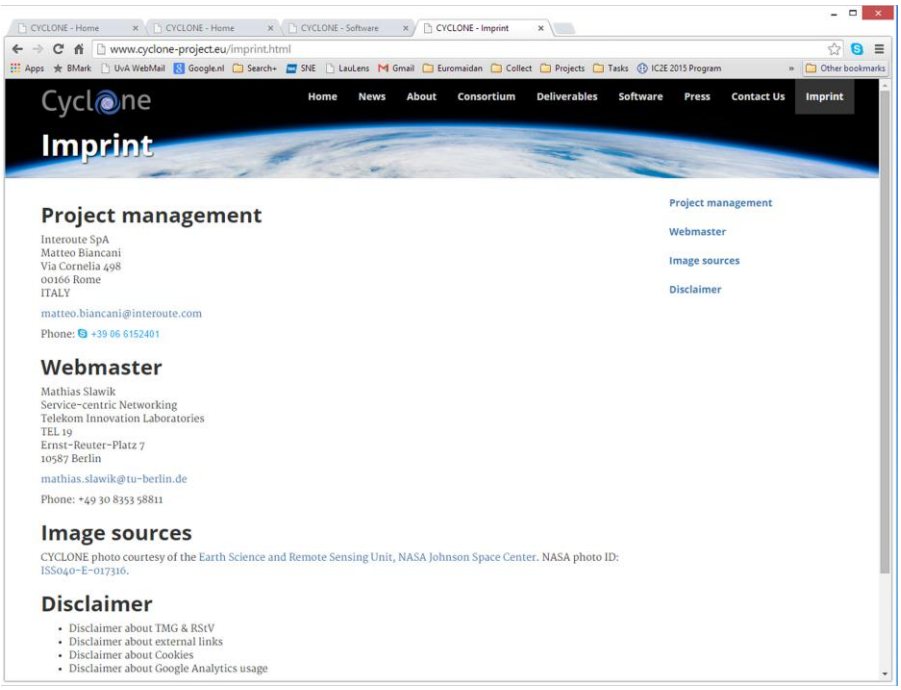
Website front page containing two sections: project introduction, and new section.





Other sample pages from the CYCLONE website.





The website design and content will evolve during the project lifetime to reflect new project development and respond to the general public and target communities demand and interests.

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