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The Evolving Use of Social Media as a Communication Tool by Nuclear Regulatory Organisations

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The mission of the NEA is:

– to assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally sound and economical use of nuclear energy for peaceful purposes;

– to provide authoritative assessments and to forge common understandings on key issues as input to government decisions on nuclear energy policy and to broader OECD analyses in areas such as energy and the sustainable development of low-carbon economies.

Specific areas of competence of the NEA include the safety and regulation of nuclear activities, radioactive waste management and decommissioning, radiological protection, nuclear science, economic and technical analyses of the nuclear fuel cycle, nuclear law and liability, and public information. The NEA Data Bank provides nuclear data and computer program services for participating countries.

COMMITTEE ON NUCLEAR REGULATORY ACTIVITIES (CNRA)

The Committee on Nuclear Regulatory Activities (CNRA) is responsible for NEA programmes and activities concerning the regulation, licensing and inspection of nuclear installations with regard to both technical and human aspects of nuclear safety. The Committee constitutes a forum for the effective exchange of safety-relevant information and experience among regulatory organisations. To the extent appropriate, the Committee reviews developments which could affect regulatory requirements with the objective of providing members with an understanding of the motivation for new regulatory requirements under consideration and an opportunity to offer suggestions that might improve them and assist in the development of a common understanding among member countries. In particular it reviews regulatory aspects of current safety management strategies and safety management practices and operating experiences at nuclear facilities including, as appropriate, consideration of the interface between safety and security with a view to disseminating lessons learnt. In accordance with *The Strategic Plan of the Nuclear Energy Agency: 2017-2022*, the committee promotes co-operation among member countries to use the feedback from experience to develop measures to ensure high standards of safety, to further enhance efficiency and effectiveness in the regulatory process and to maintain adequate infrastructure and competence in the nuclear safety field.

The committee promotes transparency of nuclear safety work and open public communication. In accordance with the NEA Strategic Plan, the committee oversees work to promote the development of effective and efficient regulation.

The committee focuses on safety issues and corresponding regulatory aspects for existing and new power reactors and other nuclear installations, and the regulatory implications of new designs and new technologies of power reactors and other types of nuclear installations consistent with the interests of the members. Furthermore, it examines any other matters referred to it by the NEA Steering Committee for Nuclear Energy. The work of the committee is collaborative with and supportive of, as appropriate, that of other international organisations for co-operation among regulators and consider, upon request, issues raised by these organisations. The Committee organises its own activities. It may sponsor specialist meetings, senior-level task groups and working groups to further its objectives.

In implementing its programme, the committee establishes co-operative mechanisms with the Committee on the Safety of Nuclear Installations (CSNI) in order to work with that committee on matters of common interest, avoiding unnecessary duplications. The committee also co-operates with the Committee on Radiological Protection and Public Health (CRPPH), the Radioactive Waste Management Committee (RWMC), and other NEA committees and activities on matters of common interest.

Foreword

In 2014, the NEA Working Group on Public Communication of Nuclear Regulatory Organisations (WGPC) published "Nuclear Regulatory Organisations, the Internet and Social Media: The What, How and Why of their Use as Communication Tools" (NEA, 2014), a social media guide that outlined the most popular social media tools of that time being used or considered for usage by nuclear regulators around the world. The report also included a survey of social media usage, tips and techniques for initiating an effective social media programme, and lessons learnt for handling hurdles and challenges – some of which were outlined in case studies submitted by member countries.

An informal survey conducted in 2012, prior to the report's publication, reflected that Nuclear Regulatory Organisations (NROs) were generally aware of social media as an important communication tool, and many were using it or considering its usage. However, many organisations were unclear how to proceed in developing social media content, how to integrate the platforms into existing public communication programmes and how to persuade management that social media is an important and credible tool.

That first report remains a viable how-to handbook and while social media has evolved in the past few years, the most popular platforms remain popular and some of the challenges of the past also remain. The advice and guidance therein have stood the test of time. The present volume is not intended to supplant the original report; rather it is intended to reflect and chronicle the growing use of social media by nuclear regulators, as evidenced in the formal social media survey conducted from November 2017 to February 2018, and to offer new case studies from which both successes and lessons learnt can be gleaned.

Acknowledgements

This report was researched and written by the NEA Working Group on Public Communication of Nuclear Regulatory Organisations (WGPC).

The WGPC Team on social media led by Holly Harrington (Nuclear Regulatory Commission [NRC], United States) and Emmanuel Bouchot (Nuclear Safety Authority [ASN], France) under the guidance of WGPC chair Sebastian Hueber (Swiss Federal Nuclear Safety Inspectorate [ENSI], Switzerland).

In addition to these individuals, many thanks are due to the individuals who took the time to fill out the survey from the following countries: Belgium, Canada, Finland, France, Germany, Hungary, India, Japan, Korea, the Netherlands, Norway, Poland, the Slovak Republic, Spain, Switzerland, Sweden and the United States. Thanks are also extended to those who contributed to the content by submitting case studies. Moreover, many WGPC members provided useful comments and editing suggestions, for which the team is grateful.

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List of abbreviations and acronyms

ANVS	Authority for Nuclear Safety and Radiation Protection (Netherlands)
ASN	Nuclear Safety Authority (France)
BMU	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Germany)
CNRA	Committee on Nuclear Regulatory Activities (NEA)
CNSC	Canadian Nuclear Safety Commission
CSN	Nuclear Safety Council (Spain)
ENSI	Federal Nuclear Safety Inspectorate (Switzerland)
FANC	Federal Agency for Nuclear Control (Belgium)
HAEA	Hungarian Atomic Energy Authority (Hungary)
IAEA	International Atomic Energy Agency
NEA	Nuclear Energy Agency
NRA	Nuclear Regulation Authority (Japan)
NRC	Nuclear Regulatory Commission (United States)
NRPA	Radiation Protection Authority (Norway)
NSSC	Nuclear Safety and Security Commission (Korea)
PAA	National Atomic Energy Agency of Poland (Poland)
SSM	Radiation Safety Authority (Sweden)
STUK	Radiation and Nuclear Safety Authority (Finland)
UJD	Nuclear Regulatory Authority (Slovak Republic)
WGPC	Working Group on Public Communication of Nuclear Regulatory Organisations (NEA)

Executive summary

The topic of social media as appropriate for further study was first proposed by the NEA Working Group on Public Communication of Nuclear Regulatory Organisations (WGPC) to the NEA Committee on Nuclear Regulatory Activities (CNRA) at its December 2010 meeting. At that meeting, the CNRA approved the new task and identified it as high priority. The report, "Nuclear Regulatory Organisations, the Internet and Social Media: The What, How and Why of their Use as Communication Tools" (NEA, 2014) reflected both the awareness by nuclear organisations of the importance of social media as a communication tool, as well as offering guidance and advice that leveraged the experiences of those NROs that had already adopted the use of social media.

From the outset, the 2014 report was expected to be updated as social media usage generally expanded and platforms rose or fell in popularity, but also in order to reflect the lessons learnt and experiences of those NROs that began adopting or expanding platform usage since the initial report was published. In the spring of 2017, the WGPC determined that it was an appropriate time to begin reassessing social media usage by NROs and to initiate a formal survey as a foundation for an updated report. The proposal received a positive response from the CNRA in June 2017 and the working group commenced its work and completed it a year later.

This report provides the results of the formal social media survey conducted from November 2017 to February 2018, and it offers new case studies from which both successes and lessons learnt can be gleaned.

The report concludes that social media does not replace traditional means of communicating with the public. There remains a need for press releases, fact sheets and public meetings to communicate to the public, special interest groups, other government organisations, industry and academia, and the media. However, it has become obvious that social media is no longer an optional endeavour if an organisation wishes to communicate successfully and capably with its stakeholders. Social media is now fully integrated in the nuclear communicator's toolbox.

Introduction and general considerations

Before studying the data and reading the analysis presented in this report, it may be useful to reiterate what is referred to with the term "social media", and to review some of the new usage data, particularly that of interest to communicators of nuclear regulatory organisations around the world.

"Social media" is a term referring to various activities that integrate technology, social interaction and content creation (Wankel, 2010). As the 2014 report states, "social media can also be thought of as a way of using technology to 'enable conversations' that take place outside of the constraints of time and location – people can access the information any time of the day or night, from anywhere'" (NEA, 2014: 4). In addition, social media is content that can be easily shared, thus magnifying its impact – both positively and negatively. Social media has increasingly become part of the fabric of people's lives.

Social media is not just a vehicle for disseminating information, it is also a means of listening to the public. The 2014 report recalls that "social media allows the regulator to obtain real-time feedback about the success (or failure) of messages or communication endeavours" (NEA, 2014: 15). Using social media to listen to the public or other stakeholders is a strategic use of these platforms – even if a regulator has initiated few social media platforms of its own. According to the results of the WGPC survey, for example, 14 out of 16 respondents monitor social media and some respond to the questions, rumours or false information they discover as a result.

The concept of social media listening was underscored during the January 2017 NEA Workshop on Stakeholder Involvement in Nuclear Decision Making. As noted by Sunni Locatelli, former chair of the Nuclear Energy Agency (NEA) Committee on Nuclear Regulatory Activities (CNRA) Working Group on Public Communication of Nuclear Regulatory Organisations (WGPC) and a moderator during a panel session, "many of the most valuable pieces of information that can be gathered from monitoring social media exist in the comments section where stakeholders are free to express themselves and criticise and question the process and the main actors."

The role of social media in times of crisis was fully explored in Chapter 9 of "Nuclear Regulatory Organisations, the Internet and Social Media: The What, How, and Why of their Use as Communication Tools" (NEA, 2014).[1] The importance of social media to communicate incident information cannot be understated. As the 2014 report stated: "The need to provide information quickly and accurately during a crisis makes social media an extremely valuable tool for nuclear regulators" (NEA, 2014: 49). The report further emphasised that the midst of a crisis is not the time to begin exploring the use of new platforms. If for no other reason, then, NROs may seek to have mature platforms in full use during "normal operations," so they are ready to be fully and successfully utilised in a crisis. Indeed, 13 of the 16 respondents to the 2017 WGPC survey using social media indicated that it is part of the NRO's communication strategy, with many citing Twitter as an especially important crisis communication platform. Anecdotally, the NROs acknowledged that the fast pace of information in a crisis situation poses unique challenges for social media message development and timely management review and approval.

1. For the sake of brevity, references in the text to the 2014 volume use the title "Nuclear Regulatory Organisations, the Internet and Social Media" (NEA, 2014).

Social media statistics

In January 2019, there were some 4.388 billion Internet users (57% penetration) and 3.484 billion active social media users (45% penetration) globally – an increase of 9.1% and 9% respectively since January 2018 (Kepios, 2019). That data point alone underscores that the Internet/social media/digital revolution is far from over. Of course, there are regional disparities in use of and access to digital resources. Africa has a 29% penetration for Internet users and 14% in active social media users compared to 71% and 60% respectively in the Americas. Yet, even in areas of comparatively lower usage, the annual growth percentages are significant – 32% increases in active social media users in Africa, 25% in Asia-Pacific and 47% in the Middle East (Kepios, 2019).

In a report published in June 2018 by the Pew Research Center, it was noted that social media usage continues to rise in developing countries, and remains high in developed countries, with the gap narrowing. One important statistic focused on smartphone usage around the world, given the importance of smartphones for access to the Internet and social media applications. According to the report, some 40% of people in emerging and developing economies reported owning a smartphone; countries with advanced economies reflected nearly three in four people owned a smartphone (Poushter, 19 June 2018). The benefits and process for development of content specifically for mobile viewing might be an area for future study.

Facebook and YouTube are two of the most frequently used social media platforms globally – with 2.12 and 1.9 billion active users respectively (Kepios, 2019). Similarly, 11 of 16 of the NROs responding to the working group survey reported having a Facebook page and the same number indicated they had a YouTube channel.

The Pew Research Center, in a study of US social media usage, also found that Facebook and YouTube "dominate" the social media landscape. However, the centre's "Social Media Use in 2018" report noted that younger Americans (18-24 years old) were heavy users of Instagram and Snapchat (Smith and Anderson, 2018). Yet only one respondent to the WGPC survey used the former and none used the latter. The sparse use of those two platforms does not mean NRO content is failing to reach younger audiences. The Pew Research Center report pointed out that both American adults and young adults used multiple social media platforms. Eurostat found that nine out of ten young people in Belgium, Croatia, Cyprus, Denmark, Estonia, Hungary, Lithuania, Luxembourg, Portugal and the Slovak Republic used social networking sites, while the majority of the remaining EU member states reported that between 80% and 90% of young people participated in these activities (Eurostat, 2017). While young adults may ultimately see NRO content given their intense usage of the Internet, a closer look at how to communicate with younger audiences might be an appropriate area for future study.

Finally, it is worth reiterating the drawbacks and risks associated with social media. As noted in "Nuclear Regulatory Organisations, the Internet and Social Media" (NEA, 2014) social media can lead to impossible-to-stop misinformation, creates a platform for "trolls" or others who use the NROs own platforms to criticise and ridicule, and requires additional communication resources to manage and exploit effectively. Among the challenges cited by NROs that responded to the WGPC survey were: aggressive online debates, a lack of time and resources, and negative comments.

It should be emphasised that no matter the power or allure of social media in an increasingly interconnected world, social media does not replace traditional means of communicating with the public. There is still a need for press releases, fact sheets, public meetings and other methods to communicate. These remain valid tools in a communicator's toolbox. It is also important that social media be fully integrated into an outreach/public relations/communication strategy. It should not be undertaken because "everyone's doing it." Social media is a tool. It should be assessed for its benefit to the organisation and undertaken in a sensible, cautious way consistent with the regulator's goals, and the cultural norms and expectations of the stakeholder population.

As noted in the summary report, *NEA Workshop on Stakeholder Involvement in Nuclear Decision Making*, "Social media is one of many tools that can be used to address issues and gaps strategically but should not replace existing methods of information dissemination and should complement other forms of stakeholder involvement. Social media allows the magnification of a message simultaneously on various platforms to share the organisation's perspective. Different platforms target different audiences and should be used in integrated and compatible ways. Though a message can be broadcast directly, it is still important to be engaged with traditional media outlets. The reach of information will be increased in turn via these outlets' own social media accounts" (NEA, 2017: 43).

Survey data and analysis

A survey of social media use by WGPC members was conducted from November 2017 to February 2018. Ultimately, 17 responses were received,[2] in which 16 countries indicated at least some usage of social media. These were: Belgium, Canada, Finland, France, Germany, Hungary, Japan, Korea, the Netherlands, Norway, Poland, the Slovak Republic, Spain, Switzerland, Sweden and the United States.

Highlights

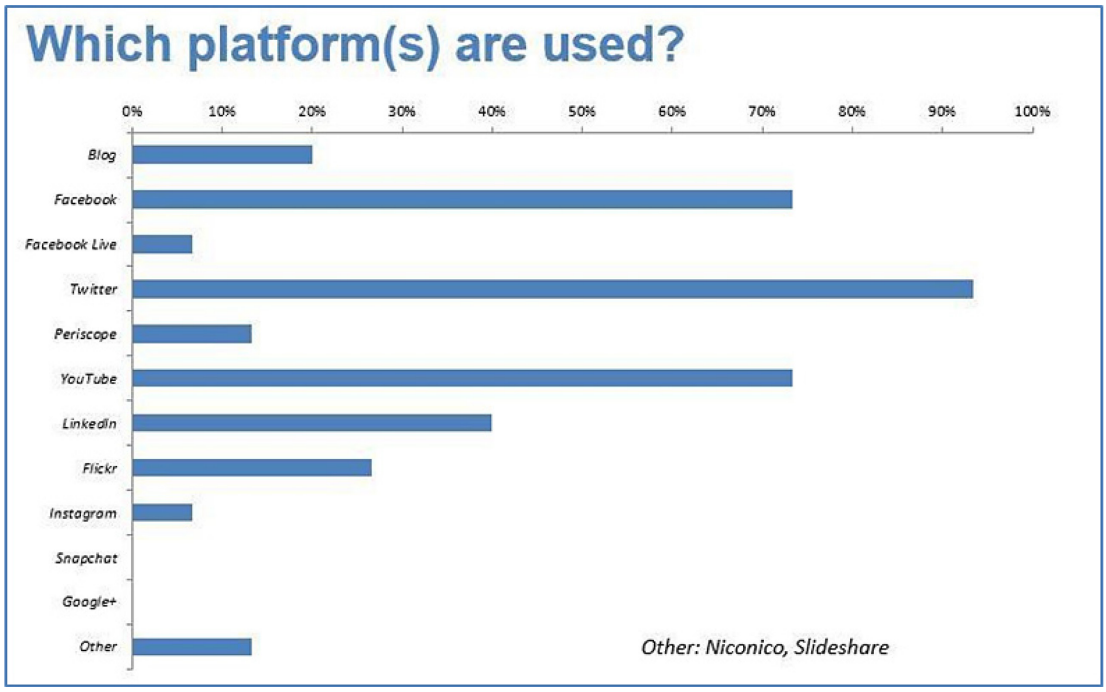
- All NEA member countries that responded use at least one social media platform.
- The social media platforms used by Nuclear Regulatory Organisations (NROs) were consistent with the most popular social media platforms identified by various social media experts, notably Twitter, Facebook and YouTube.
- NRO management is supportive of the use of social media, with 15 respondents indicating a supportive managerial environment.
- The vast majority of NROs restrict those able to post on official social media platforms, with most identifying the communications department as the entity granted the authority to post.
- A slight majority of NROs (9 out of 16 with social media platforms) provide a policy or guidance to staff on using social media. Most of the guidance focuses on using good judgement, protecting sensitive or prescribed information and not speaking on behalf of the organisation unless authorised to do so.
- Only half of the NROs conduct training for staff on how to use social media.
- Social media is considered an important component of a crisis communication strategy for 13 of 16 respondents with social media platforms.
- The vast majority (14 of 16) of NROs with social media programmes also monitor social media and 13 of 16 directly engage with the public on social media, including responding to questions and correcting misinformation.
- Most of the NROs reported that their social media programmes were growing in usage and audience, as well as acceptance, and cited many benefits, including enhanced awareness of the NRO, increased transparency, more successful interactions with the public and an improved relationship with stakeholders.
- Most NROs cited a shortage of personnel resources needed to properly manage social media as the greatest challenge.

2. NEA Strategic Partner India was invited to contribute to the survey. The Atomic Energy Regulatory Board of India (AERB) responded that it does not currently use any social media. In its survey response, it was noted that the organisation "has recently revamped its external website and made it more interactive and public friendly. Efforts are being made to explore suitability of social media platforms for public communication."

Which social media platforms are used?

The social media platforms used by NROs were consistent with the most popular social media platforms, notably Twitter, Facebook and YouTube. The most often-cited platform in the WGPC survey was Twitter, with 14 respondents reporting that they were using it.

Social media platforms used by nuclear regulatory organisations in 2018



NROs report using Twitter with a goal both to communicate directly with journalists and to provide unfiltered information directly to the public. Twitter is uniquely positioned to accomplish both objectives. According to the Hootsuite blog, in 2018, there were more than 330 million monthly active Twitter users around the world, with more than 40 languages supported. Forty-two percent of Twitter users access the platform daily; another 24% access it weekly. Nearly three-quarters of users say they use the platform to get their news (Newberry, 17 January 2018).

Journalists consistently use Twitter both to collect information and to distribute it. According to a survey from Muck Rack, a start-up that analyses journalistic practice, 70% of journalists see Twitter as a valuable social media tool (Lawlor, 31 May 2017). As noted in a Forbes article in May 2017, more than 500 million tweets are sent every day, with news increasingly "breaking" on Twitter, rather than being reinforced on Twitter after the news breaks in other ways (Lerner, 26 May 2017).

Aware of its value as a news source for the media and the public, 14 of the NROs who responded to the survey use Twitter to disseminate news and updates (the Federal Agency for Nuclear Control of Belgium [FANC], the Canadian Nuclear Safety Commission [CNSC], the Swedish Radiation Safety Authority [SSM], the United States Nuclear Regulatory Commission [NRC]) about their organisations. Some, including the National Atomic Energy Agency of Poland (PAA), use Twitter primarily for crisis situations. Many NROs report that Twitter was one of the first platforms they adopted and some believe it is the most important. A high percentage of organisations have incorporated Twitter into their crisis communication planning and simulate its use during emergency drills (e.g. ASN, IAEA, NEA, NRC). Many also report growing numbers of followers. In the case of the Spanish Nuclear Safety Council (CSN), a decision was made in 2011 to use Twitter. Staff limitations meant the NRO could use only one platform and Twitter was considered the most useful (see Case Study 1).

Case Study 1: Spain – The importance of Twitter

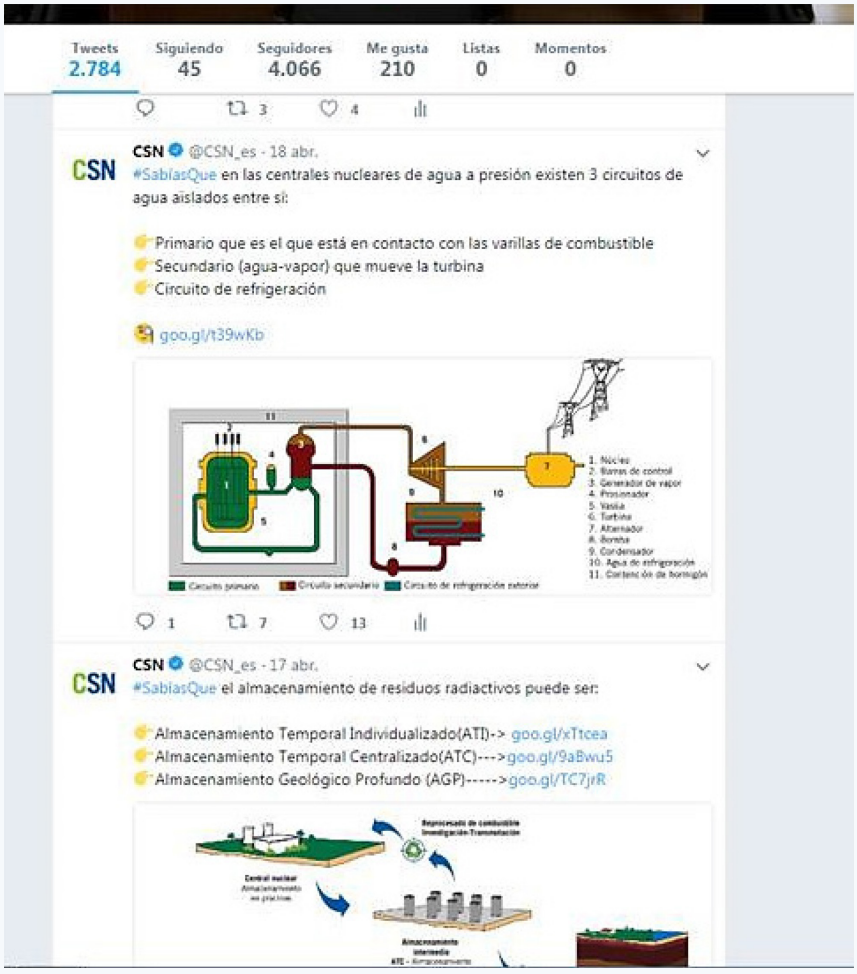
Regulator name and country: Nuclear Safety Council (CSN), Spain.

Platform name and link: Twitter: @CSN_es

Brief overview of the issue/activity: Since the CSN opened its Twitter account in 2011, the communications department developed a strategy to feed it routinely with content. This is challenging because, as a regulator, we do not generate news daily. However, when you open a Twitter account, you need to be active and to feed it with interesting content for your followers. After brainstorming about it, we decided a good way of feeding our Twitter account was to create an educational thread on nuclear and radiological issues. Even more, we thought that doing these "educational tweets" could enhance citizens' knowledge of this issue and we might even be able to offset false rumours.

Approach and process: Once we decided to create a chain of educational tweets, we established a hashtag #sabíasque (#didyouknow) so if people wanted to read all the tweets together (since most of them are related) they can click on the hashtag. Every week we set up between two and three educational tweets with photographs and graphics that illustrate the information. We also have a specialised magazine called ALFA, from which we pull content and curiosities to post on Twitter, all related to the nuclear and radiological field. The magazine is published four times a year, so each time a new issue is published, we pull content and spread it out over time. We consider this a good source as the content is interesting and educational.

Details of implementation: There is no cost associated with Twitter, as we manage it within the communications department and use existing personnel to search for and post content.



Outcome: The outcome is very positive. Since we started using Twitter, we have more traffic, more followers, the conversations between followers about nuclear and radiological issues have increased considerably – and people are starting to know us as the national regulator.

Lessons learnt/recommendations: As a nuclear and radiological regulator, it can sometimes be difficult to use social media. Our role is to keep the citizens informed about nuclear and radiological issues but we cannot enter into discussions even though social media often generates a lot of controversy. However, with this strategy centred on posting primarily educational tweets, we believe we are achieving several objectives: keeping the platform active, informing citizens about nuclear energy uses and impacts, and clarifying misinformation often spread as rumours through social media.

Most of the survey respondents monitor Twitter, while a smaller percentage actually respond to questions and correct misinformation on Twitter, including the Radiation and Nuclear Safety Authority of Finland (STUK), the Norwegian Radiation Protection Authority (NRPA) and SSM. The NRC and others noted that they do not respond via Twitter or limit interaction in order to avoid "Twitter debates".

One additional use of Twitter gaining some momentum among NROs, particularly those with more mature social media programmes, is "live tweeting." Both the NRC and CNSC have found this tactic useful (see Case Studies 2 and 3 below).

Case Study 2: United States – Live tweeting during the Regulatory Information Conference

Regulator name and country: US Nuclear Regulatory Commission

Platform name and link: Twitter; https://twitter.com/NRCgov

Brief overview of the issue/activity: The NRC uses Twitter to promote agency press releases, blog posts, YouTube videos and other content to approximately 9 000 followers. Twitter is also an important component of our crisis communication strategy. On occasion, we use Twitter to "live tweet" from important and high-level meetings or conferences. The agency's Regulatory Information Conference is held annually and is the highest profile conference hosted by the NRC. It attracts thousands of participants, including many from the international nuclear community. In 2017, for the second time, the NRC's Office of Public Affairs identified eight high-profile technical sessions and keynote addresses from which we would tweet. Our social media specialist did the tweeting, assisted by public affairs officers who were familiar with the content in order to assure accuracy.

Approach and process: The Office of Public Affairs identified the sessions to be live tweeted and identified the appropriate public affairs officer to accompany the social media specialist. The concept of the live tweeting was announced via prior tweets and noted on the website pages devoted to the conference. The officials who were responsible for putting on the three-day conference were supportive of the effort as it potentially enhanced the experience for those in the audience and served to raise the overall profile of the conference. There were some minor technical challenges, such as ensuring Wi-Fi was available and identifying which laptop would provide the best support. Some tweets were pre-prepared, such as those taken from the keynote addresses. A few tweets included photos.

Details of implementation: There were 71 live tweets over the course of 8 sessions. The most popular sessions related to advanced reactors. Sample tweets appear below.

- Adv. Reactors #RIC2017 – #NRC: some advanced #reactor coolants easier to analyse than water/steam systems.
- Pwr. Reactor Decommissioning – #RIC2017 – Entergy says recent decomm transition at "Vermont Yankee" went smoothly thanks to advance planning.
- Adv. Reactors #RIC2017 – #NRC: history of DOE computer codes will help advanced – #reactor analysis.
- Adv. Reactors #RIC2017 – #NRC: experience licensing new medical isotope facility will help adv. #reactor activity.

Outcome: The 71 tweets from RIC2017 generated an average of 1 000 "impressions" and 7 engagements per tweet. These tweets underperformed compared to our 2017 average for all tweets by approximately 50%; not an unexpected outcome given the very focused nature of the content.

Lessons learnt/recommendations: The underperformance of our Regulatory Information Conference (RIC) live tweeting does not deter us from continuing to use live tweeting during the RIC and to continue to use it sporadically for other high-profile meetings. We feel the cost in terms of resources is minimal and the occasional use of live tweeting may reach some new audiences, allows us to experiment with new uses for Twitter and hones our ability to tweet content quickly.

Case Study 3: Canada – Live tweeting during Commission Proceedings

Regulator name and country: Canadian Nuclear Safety Commission (CNSC), Canada Platform Name and Link: Twitter: @CNSC_CCSN/@CCSN_CNSC

Brief overview of the issue/activity: The Commission is an independent administrative tribunal set up at arm's length from government, with no ties to the nuclear industry. The Commission makes its decisions transparently, guided by clear rules of procedure. Interested parties and members of the public can be heard at Public Commission Hearings, which are Webcast live and often held in facility host communities to make them as accessible as possible to local residents.

The purpose of live tweeting during Commission proceedings (hearings as well as meetings) is to increase the CNSC's ability to be as transparent as possible by building its Twitter social media audience. Because highlights from the Commission proceedings are being shared on Twitter, CNSC's audience has the opportunity to ask questions or get more info about a particular topic. It should be noted that any comments made or questions asked on Twitter during a Commission proceeding does not inform a decision to be made by the Commission.

Approach and process: Once Commission member documents (CMD) are made available, they are read by the e-Communications team. Of particular use are the CNSC staff presentations, from which the tweets are developed. Tweets are drafted and sent to the appropriate Communications Advisors for review. At this time, the tweets are also sent through English editing and French translation. Once text is finalised, members of the e-comms team can finalise images to accompany tweets.

Details of implementation: Hootsuite, the Government of Canada's official dashboard for social media, is used to upload tweets and images once they are final. This sets the e-comms team up for when the Commission days are held, as the tweets can then simply be pushed as topics are being discussed.

Outcome: The immediate outcome is awareness. The public needs to know there is an authoritative voice who will communicate and engage regularly. The Intermediate outcome is to deepen understanding and perceptions about nuclear safety. The ultimate outcome is to change perceptions and restore public confidence in nuclear safety. To achieve these outcomes, the CNSC must first listen to its audience to understand their needs. The CNSC should correct factual errors, which would then increase understanding and knowledge. By pursuing the first two outcomes, the third will eventually be achieved, acknowledging that this might take a few years.

Lessons learnt/recommendations: Monitoring the social media public environment is key for successful communications. Images significantly increase message salience and visibility on social media. Openness and transparency on social media help improve public confidence.

The second most commonly used social media platform cited in the survey was a tie between Facebook and YouTube (11 out of 16 respondents using social media). Both platforms boast enormous international audiences. According to research published by Hootsuite, in 2018 there were 1.87 billion active Facebook users around the world and 1 billion YouTube users. Facebook particularly has great international versatility. Also according to this research, a significant number of countries have daily Facebook users as high as 50% of total users, including Argentina, Australia, Canada, France, Germany, Italy, Mexico, Spain, Thailand, the United Kingdom and the United States (Newberry, 17 January 2018). According to the website Brandwatch, YouTube is available in a total of 76 different languages (covering 95% of the Internet population). The platform has launched in over 88 countries, and is the third most visited site after Google and Facebook (Smith, 2 September 2018).

As with Twitter, NROs noted that both Facebook and YouTube allow them to disseminate information and news both to journalists and to the public. In some cases, the NRO uses Facebook to highlight information on the website (Hungarian Atomic Energy Authority [HAEA], NRC). In other cases, Facebook content stands alone. The Swedish Radiation Safety Authority (SSM) developed and implemented a specific Facebook communication campaign related to radon and sun exposure.

Tips for using Facebook:[3]

- Customise the page as much as possible to be as consistent with your other social media platforms (Bradley, 2010).
- Build your audience by asking individuals to "like" your page. Push information from Facebook to your other social media platforms by sharing blog posts and web content, and tweet new content on Facebook (Bradley, 2010).
- "Make sure you are adding content frequently--preferably at least daily. You want to provide a reason for the Facebook page audience to check in and see what's new" (Bradley, 2010).
- Vary the visuals of the profile in order to be noticed in the news stream by fans who would otherwise pay little or no attention to the posts.
- Provide a level of information that is both mainstream and educational to ensure that nuclear safety and radiation protection issues are understood.
- Publish a dialogue charter to clarify the conditions in which users can express themselves on the page and in which the organisation can intervene as moderator.
- Promptly respond to comments.

Some NROs report their success with Facebook has led to more support within the organisation for social media in general as a communication tool. NROs acknowledge that journalists monitor their Facebook postings, which augments press releases as additional sources for news coverage (NRC, HAEA, ASN). NRPA noted Facebook makes it easier for the public to reach them to ask questions. Facebook Live is one uncommonly used feature that shows potential (see Case Study 4 below).

Case Study 4: Germany – The usage of Facebook Live

Regulator name and country: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), Germany

Platform name: Facebook Live: www.facebook.com/bmu.bund/videos/2162345170662779/

Brief overview of the issue/activity: BMU is using Facebook Live to reach a wider public audience in a low-cost and informal matter. To date, Facebook Live has been used to carry out three interviews: two with the Minister and one with the Secretary of State.

BMU has also considered using Facebook Live to broadcast certain speeches during scheduled events or conferences, to reach out to a wider audience that cannot attend the event. This was done once and, due to what was considered low impact/low interest, will not be repeated at this time.

Approach and process: BMU's communication team is continuously looking at ways to expand the use of Facebook and increase the visibility of the department and its Minister. The team had been interested in using the feature of Facebook Live to inform the general public for over one year. Recent elections in Germany postponed the initiative, until a new Minister was in place to ensure there was engagement from the head of the organisation.

Supporters: The recently elected BMU Minister (2018) is familiar with Facebook, having her own Facebook account, and wants to be open on issues and engage informally with the public. She was thus a very big proponent to the idea of using Facebook Live to carry out interviews driven by public interest and remains open to suggestions on increasing visibility on Facebook.

No major obstacles were encountered.

3. For more tips on using Facebook, see "Nuclear Regulatory Organisations, the Internet and Social Media" (NEA, 2014).

The goal is to hold one Facebook Live interview per month. The interviews are moderated and include the Minister and, as appropriate, other internal or external guest(s). They last approximately 30-40 minutes. The topics of public interest are identified either by BMU, based on the topics that receive great attention on social media. The interview is announced in advance (by scheduling an event on Facebook) and the public can provide questions ahead of the interview. The communications team sifts through the questions and seeks assistance from the technical experts as needed to prepare responses to these questions and any other that the communications team think may be posed during the interview. These responses are shared with the Minister and the moderator in advance. The Minister also sees the additional, filtered questions on a screen as they come in live during the interview. NOTE: filtering is done to ensure relevancy and respect.

Details of implementation:

- Resources are needed from both technical and strategic areas, 2-3 technical experts from IT are needed to set up the room and the platform.
- Two to three communication experts are needed to consult subject matter experts in advance, develop and deliver messages on the Facebook page, and filter questions in advance of, and during the actual interview.
- Negligible costs are associated to bring strong Internet connection on the day of the interview – this is essential to do Facebook Live.
- Rules of engagement for the public are provided, i.e. need to remain respectful and on topic.

Objectives and actual outcomes:

- To open the topic to the broader public, using an informal approach.
- To address topics relevant to the public.
- To determine which topics the public wants more information on, how best to communicate the information, how to engage them in the topic (assists communications team in their work).
- To identify which topics should be on the ministry's agenda.

Facebook Live is used more as a one-way communication: i.e. the Minister responds to the general themes not to individual requests. There is no further exchange or back-and-forth with the public during the interview. However, the interview can trigger/spark a debate among those users/participants. BMU does not interact in these exchanges, unless there is serious criticism or blatant untruths. The results and numbers are monitored. The interview (video and audio) remains available on Facebook after the live event, as does the written exchanges between members of the public.

The platform facilitates easy monitoring of the feedback from the Facebook channel. The communication team considers the feedback to conduct future interviews, both from a technical and topical aspect.

Lessons learnt: For interviews: facilitates broader reach and helps communication team in achieving its mandate (what and how to communicate to the public). BMU will keep using this personal and specific communications approach.

For speeches/conferences: not as successful and will not be pursued.

Recommendations:

- Find good topics for the public.
- Use the existing manpower available.
- Prepare the interview very well, be sure that all are well informed on the use of the platform.
- Ensure your interviewees are well prepped with potential questions shared ahead.

Lack of time and resources appear to impact NROs being able to fully utilise YouTube. As noted in "Nuclear Regulatory Organisations, the Internet and Social Media", "YouTube is a social media site that, while important and arguably necessary as a communication tool, requires significantly more planning, skills and resources to pull off successfully than even a blog. Videos require not just ideas, but scripts, narrators, videographers, video editors, and even graphics and design support" (NEA, 2014: 37).

Recommendations Related to YouTube[4]:

- Videos do not have to be Hollywood quality. A less-than-perfectly polished video might be more acceptable to the public than a slick, over-produced one.
- Videos need to be short. Those of 2 minutes have a high level of engagement; anything more than 10 minutes should be looked at very closely for ways to trim. There might be some cultural differences here, with some country's publics more willing to watch longer videos.
- Videos need to be in clear, plain language, scripted "for the ear" and interesting enough to hold an audience. Liberal use of b-roll (i.e. background roll or general images to illustrate the content being discussed) and interviews should break up reliance on "talking heads".
- Take advantage of the text description on YouTube to help people find your videos during searches.
- Be sure to tweet the URL for new videos and, when appropriate, write a blog post about each video.
- Be clear that you are the producer of a video. Do not try to hide your organisation.
- Create a series of similar videos to build audience.

According to YouTube some 500 hours of video are uploaded onto the site per minute, and more than 1 billion hours of content is available on the platform. In some cases, it appears YouTube is used largely as a vehicle for broadcasting meetings rather than posting "unique content" developed specifically for YouTube. The NRC, for instance, while posting a number of "unique content videos," including historical pieces on nuclear/radiological events of significance, cites resources as the reason the platform is not more fully utilised. However, by posting videos albeit irregularly, the agency believes it is keeping the platform viable and available in the event of a significant crisis, at which time the platform would prove invaluable to providing news and information to the public and the media (see Case Study 5 below).

Case Study 5: Canada – Using YouTube Live to stream Commission Proceedings

Regulator name and country: Canadian Nuclear Safety Commission (CNSC-CCSN), Canada

Platform name and links: YouTube Live

English: www.youtube.com/cnscccsn

French: www.youtube.com/ccsncnsc

Brief Overview of the Issue/Activity: The CNSC conducted a pilot to stream our Commission proceedings on YouTube Live from our English and French YouTube channels.

The pilot allowed us to test a new platform in support of greater transparency and user choice; to determine what resources are required to support YouTube Live streaming on an ongoing basis; and to consider whether YouTube Live could help build our public audience for Commission proceedings and other publicly available events.

Approach and process: The pilot was conducted in two parts:

Part 1 (9 November 2017) – was a technical pilot meant to test the functionality of YouTube Live and to allow us to resolve any streaming or technical issues.

Part 2 (13-14 December 2017) – was a promoted pilot that made our audience aware of our YouTube Live event through our social media channels, e-mail communication and our website.

4. For these and other tips on maximising YouTube, see *Nuclear Regulatory Organisations, the Internet and Social Media* (NEA, 2014).

Details of implementation: To support our YouTube Live initiative, we needed to assign additional tasks to our existing resources before, during, and after the event, and add one full-time resource during the proceeding to moderate the livestream.

The pilot allowed us to identify the roles, tasks, and time contributions required from our team members. These included:

- Promotion: Communications plan to promote YouTube Live events; communications approach for each proceeding; creation of communication products.
- Engagement: Communications advisor to facilitate the Live Chat, answer Live Chat questions and to liaison with subject matter experts to validate engagement content.
- Troubleshooting: Support resources to monitor the quality of the livestream and to resolve any technical issues.
- Analysis: Resource to compile analytics and provide post-event analysis.

Outcome: The pilot successfully demonstrated that we could support a YouTube Live event that increases transparency and public engagement during our Commission proceedings. Viewer engagement through Live Chat would build our public audience and offer a real-time channel for viewer comments, questions, and conversation.

If we planned to use YouTube Live again, it would be important to regularly provide supplementary and background information on upcoming live events through our existing communication channels (social media, subscriber emails and regular web postings). Each livestream should be supported by ongoing informative and substantive material shared on a regular basis (before, during and after every event), as part of our communications strategy. In addition, if we hold another YouTube Live event, we would promote the event with more engaging content, encouraging the public to tune in and, specifically, to engage through Live Chat. This could include promotion on slides during the webcast start, breaks, end), and a revamped webpage for the live streaming of proceedings. In addition to the ongoing communications strategy as recommended above, an increased promotional period of a week should precede every YouTube Live event.

It would also be important to inform CNSC staff of the YouTube Live initiative and provide information on how its implementation impacts them. Staff should be provided with information on the guidelines followed by SCD when responding to comments and questions.

Finally, should we decide to move forward with YouTube Live during Commission proceedings, similar to any other social channel, we should consider growing our YouTube Live audience over time. The audience should be able to anticipate a regular schedule of upcoming events, while receiving background information on the upcoming topics. We can make this a part of our social media and communication strategy and keep our audience informed with supplementary information as it becomes available during the weeks or months before the live event. This would support a potentially larger viewership and greater engagement.

Statistical highlights December 13 and 14

Measurement	YouTube Live(ENG)	Webcast (ENG)	YouTube Live (FRA)	Webcast (FRA)
Concurrent viewers (max. number of viewers watching at the same time)	18	Not Available	3	Not Available
Live chat comments (engagements from viewers on Live Chat)	6	Not Available	0	Not Available
Total views (158 on day1 + 130 on day2)	288	1134	38	20
Average viewing duration	25 Min	Not Available	40 Min	Not Available

Lessons learnt/recommendations: Before the pilot, our focus was to ensure a stable live stream and provide timely responses to Live Chat participants. By the end of the pilot, we determined that defining an ongoing audience communication strategy and assigning resources around the YouTube Live event were also significant areas of consideration. Our next steps will include a consideration for future YouTube Live sessions as we map out our digital and social media strategy for 2018–19, as increasing public engagement and interest around Commission activities continues to be part of our objectives for the year.

There is a dramatic fall-off in platform usage after "the big three." Six NROs report using LinkedIn, primarily for recruiting and job postings. Four use Flickr and three have a blog. Two NROs use Periscope, a platform owned by Twitter that allows users to video-record and broadcast to anywhere in the world (see Case Study 6 below). One NRO reported using Instagram; and both STUK and the Nuclear Regulation Authority of Japan (NRA) use unusual social media sites not available or not widely available in other countries.

Case Study 6: Switzerland – Periscope and live video on social media

Regulator name and country: ENSI (Swiss Federal Nuclear Safety Inspectorate), Switzerland

Platform lame and link: https://twitter.com/ENSI_CH or

www.pscp.tv/ENSI_CH/1RDGldMQqZoGL

Brief overview of the issue/activity: ENSI uses live streaming on social media to bring in more people to its press conferences.

Approach and process: Since 2014, Facebook, Instagram and Co. have been increasingly relying on video content. The video content type seems to gradually displace images, which manifests itself in both usage figures and reach. As can be seen from the theoretical foundations, video will become the leading medium in corporate communication. Companies must adapt to this in order to continue to communicate in such a way that they address stakeholders where they consume their content.

There are also clear trends within video content on social media: direct transmissions as live videos, 360° videos with self-controllable perspectives and virtual reality in the form of VR glasses are considered the latest possibilities for companies to use videos for their communication. ENSI decided to further look into live streaming, as we have events that are exclusive to media or science. ENSI chose Periscope because it has the biggest audience on Twitter and Periscope is a Twitter technology.

With Periscope, ENSI wanted to generate more interested viewers for its contents as well as to generate more interaction. At least, media staff that could not attend a press conference may have an additional source of information.

There are only a few known user numbers for Periscope. Within only six months until August 2015, the platform has gained over 10 million registered users (see www.lead-digital.de/aktuell/social_media/mehr_than_10_mio_user_für_periscope).

[10.03.2016]). In July 2015, up to 40 years of video content has been consumed daily (see http://blog.hubspot.com/marketing/visual-content-marketing-strategy#sm.00004b1iovvsmfb3uqa1dapyk8ob7 [14.01.2016]).

Twitter itself claims to have sent 200 million videos via the app within its first year (see http://venturebeat.com/2016/03/28/twitters- periscope-broadcasts-200-million-streams-in-its-first-year [03.04.2016]).

Details of implementation: The resources for this technology are very small:

- iPhone (every ENSI employee has one);
- Twitter app (free);
- Periscope app (free);
- Tripod;
- Staff member installing the tripod and starting Periscope, controls if it's still running;
- (maybe moderation for live streaming);
- (maybe professional sound recording).

For ENSI's press conferences, we started filming about 10 minutes before the conference to test sound and image quality.

Outcome: Initially, ENSI wanted to create more viewers and interactions with Periscope. Although the live streams of press conferences were not moderated and the sound quality was not professional, ENSI reached 164 users with its last Periscope stream (https://twitter.com/ENSI_CH/status/970935933364301824) and therefore quadrupled the number of viewers of the press conference. On the other hand, the viewers did not really want to interact with the live stream, with no question or reaction coming in on Periscope.

Lessons learnt/recommendations: ENSI is happy about how Periscope has been used by its stakeholders and is willing to produce more live streams in the future. We recommend using Periscope and the likes as an additional source of information for any event that excludes a large amount of people. Our experiences with periscope were satisfying amid a low number of user interactions. This modest use by our stakeholders is justified by really low efforts in the communications staff. As an app-based service, Periscope is quite easy to use. We had employees with 16 to 64 years of age and all of them were able to handle the Periscope app without any difficulty. Therefore, we recommend using Periscope while the expectations of quality towards this technology are still low. Now, authorities can still test live streaming before the expectations of quality get to high and more resources for a successful use of Periscope are needed.

How are social media posting restrictions, policies, guidance and training handled?

For the vast majority of NROs, only communications staff or very select employees specialising in social media are allow to post on social media on behalf of the organisation. However, suggestions for content are typically accepted from throughout the organisation. Confining those with authority to post to a small group appears to be a function of maintaining control over the platforms and reducing risk of inappropriate postings or content. The concern about the possibility of inappropriate social media content – even in employee's personal social media accounts – prompted a number of NROs to implement policy or guidance on the topic and/or training.

Nine of 16 NROS have a policy or provide guidance. For example, CNSC provides social media best practices to employees, including using good judgement, protecting sensitive information and not appearing to speak for the agency. STUK's policy encourages staff to reveal openly who they are and where they work and to behave well online. ASN discusses risk with its employees, as well as best practices, confidentially and copyright issues (see Case Study 7 below).

Case Study 7: France – ASN's social media charter

Regulator name and country: ASN (Autorité de sûreté nucléaire, France)

Brief overview of the issue/activity: ASN is active on four social media (Twitter, Facebook, LinkedIn and You Tube). ASN has been present on social media since 2010. The Fukushima accident (March 2011) was a turning point. Since then, we have observed a constant growth in social media use among the French population and within the ASN communications policy.

The news feeds on the ASN social network accounts relay the main position statements and are followed by more than 8 000 subscribers on Twitter, more than 4 500 on LinkedIn and nearly 3 000 on Facebook. The major events in which ASN participates (parliamentary hearings, public meetings) are announced and can be followed in real time on the social networks. Social media are also used in emergency situations.

To preserve its credibility, ASN established a framework for the professional use of social media by its employees.

Approach and process: ASN has issued a social media charter in 2016 (see full charter in the Appendix), which is intended for all ASN staff members who are in a position to interact on the social media about ASN, its activities or its employees.

This document has three main objectives:

- Familiarise the staff with the use of social media and stress the role they can play in ASN communication (dissemination, "shares", alerts, etc.).
- Outline the risks: fuzzy boundary between private mode/professional mode; dissemination of information is uncontrollable, alterable, long-lasting.
- Enhance the staff accountability by giving best practices to be adopted in all publications or conversations concerning one's professional field: duty of confidentiality, copyright, discernment, etc.

The charter is printed and provided to all ASN staff. It is also available on the Intranet. Some examples of recommendations issued:

- "Digital oblivion" does not exist. Once you have posted content on the web it escapes your control and can be taken up by third parties, and remain "out there" indefinitely.
- Be attentive to "virality": a message, a photo, or other content can be propagated rapidly in the social media, as they are "networked".
- Respect the rules of copyright and image rights in all conversations and exchanges. The rules of intellectual property apply on the social media in the same way as on any publication medium.
- Maintain professional secrecy concerning your activities and those of ASN.

Before passing on information that you have received in the exercise of your professional activities or concerning these activities, ask yourself whether it is appropriate or timely to do so: has ASN already communicated on this subject? Is it not too early for you to do so?

It is preferable not to publish images that involve your work colleagues or contacts (licensees, medical centre personnel, etc.) or to disclose information gathered during your interchanges with stakeholders in the exercise of your activity at ASN.

If you want to indicate that you work for ASN in your profile, we strongly recommend that, to avoid any confusion, you use the standard disclaimer "my opinions (or my posts) are my own". This means that you have chosen to be associated with ASN and will be "representing" ASN, even without intending to. Be aware of the implications regarding your responsibility; think carefully before making "posts" or "tweets".

Lessons learnt/recommendations:

Few ASN staff use the social media in a professional way. Those who do it, mostly retweet ASN news.

It is recommended to spread largely that kind of charter within the NRO. It can be included it in the welcome booklet for newcomers.

If you encounter a problem with an employee who might be careless before joining a conversation on a "hot" issue, the best solution is to talk with him/her directly and explain that the activities and missions of ASN require a prior verification of the reliability of the information issued in its name. Make them understand that they must be aware that if they use social media in ways that concern their professional activity or are linked in any way whatsoever to the activities of ASN, they must demonstrate discretion.

ASN has been confronted with a case in which an employee tweeted about ASN's activities before ASN did, and he did so without mentioning "my posts are my own." A reminder of the charter was made.

The ENSI cautions employees to be conservative in political conversations as the agency is neutral and independent. The NRC expects its employees to maintain a clear and distinct separation between personal opinion and official NRC information and further guides them to understand the reach of social media and the unintended consequences that can occur when posting content in a public venue.

The same proportion (9 of 16) of NROs in the survey offer at least some training to staff on the use of social media. In some cases, the training is for all staff. In other cases, the training is only for the communications staff who are authorised to post social media content. In most cases, the training is not mandatory, and tends to be fairly brief. CSN, however, offers one-week courses with two levels of instruction – one for beginners and one for skilled workers wanting to improve their knowledge.

STUK goes beyond what most NROs do in terms of encouraging employees to use social media to benefit the organisation, and in terms of providing training to meet that objective (see Case Study 8 below).

Case Study 8: Finland – Authority encourages employees to communicate on social media

Regulator name and country: Finnish Radiation and Safety Authority, STUK

Platform name and link: Twitter @stuk_fi

Brief overview of the issue/activity: STUK wants to communicate in a timely, comprehensible, illustrative and humane manner in those forums where people exchange or look for information about radiation safety. STUK uses social media platforms as strategic communication tools. As of 2018, STUK had organisational accounts on Twitter, Facebook and Instagram. At STUK, communicating about radiation and nuclear safety is every employee's right and responsibility. Using social media channels is part of employee training. Management have their own accounts on Twitter and they encourage other employees to use their personal accounts too to discuss and distribute fact-based information on their areas of responsibility.

Approach and process: Communication is an essential part of implementing STUK's mission on protecting people, society, the environment, and future generations from the harmful effects of radiation. STUK promotes the transparency of its activities. Communication provides information on regulatory actions, decisions and their preparation and also helps citizens and other stakeholders to understand the role of the Radiation and Nuclear Safety Authority in society and give them the opportunity to influence and oversee their interests and rights. STUK or its employees do not take a stand on the energy policy debate.

The main focus of communications strategy during the period 2018-2022 is to help people to understand the risks of radiation. STUK provides accurate and easy-to-understand radiation safety information to enable people to understand what is hazardous and what is not and consequently act without unnecessary fear.

Reputation research among citizens, journalists and decision makers shows that STUK has high ratings on trust. Respondents have stated numerous times that one vital part on building trust is that STUK's employees, and also the management team, are easily reachable by anyone, and they are available for discussion and provide answers when needed.

According to the 2018 Digital Economy and Society Index (DESI) - a composite index published every year by the European Commission, the use of Internet services is significantly more widespread in Finland than in the EU on average. In the use of social networks, Finland is standing above the EU average. For an authority and professionals to be reachable on social media and provide science-based information to discussions is today even more important because people are subjected to information overload and also disinformation.

Radiation does not identify state borders and neither does information. Social media has changed facts how fast information spreads and it is almost unpredictable what information can be addressed only locally, therefore the authority cannot exclude social media. It certain that if a radiation emergency occurs people and media will disseminate information about it on social media platforms. During an emergency it is no time to introduce your authority in a new social media channel, it should already be in everyday use.

In quality and quantity, it is useful that communication is not made only on organisational accounts but also on personal accounts. STUK considers that it is important to build a network of trustees who endorse facts about the risks of radiation responsibly on social media channels. Employees can also gain valuable information and will be able to network in their areas of interest when using social media.

Details of implementation:

- Define the principles of communication.
- Define the goals and target groups for your communication.
- Plan your communication activities and use social media as an essential platform of your communication.
- Identify the most prominent social media platforms for your goals in your region.
- Establish your organisational accounts.
- Train employees to understand the principles of communication and how to use the platforms.
- Endorse your employees from the authority's account.
- Establish social media monitoring.
- Watch how social media landscape evolves and develop with it.

Lessons learnt/recommendations: To be able to use social media as part of strategic communications authority has to have communication culture that creates possibilities to do so. Also support and example from the management team is needed. When communication culture creates possibilities it is time to take care of the other parts required: resources, knowledge, technology, content and guidance.

When talking about employee communications in social media it is often stated that it increases the risk of spreading confidential information. However, it is part of basic training for the STUK employees to learn what kind of information is confidential (business and professional secrets and security arrangements) and how to organise communication so that it will not effect to the authority's independent judgement and decision-making. Principles are valid in all types of communication, and social media is not an exception to that.

What role does social media play in crisis communication?

As noted in "Nuclear Regulatory Organisations, the Internet and Social Media", social media is a vital communication tool in a crisis. As the report states: "The need to provide information quickly and accurately during a crisis makes social media an extremely valuable tool for nuclear regulatory organisations" (NEA, 2014: 49). In addition, social media is increasingly taking on a crisis communication role – the US Federal Emergency Management Agency, for example, monitors Twitter to help identify locations to which responders should be dispatched. Since information on social media may be incorrect, it is extremely important that regulators be adept at using social media during regular business in order to ramp up its usage during an incident. It is impractical to assume an NRO would be able to implement a new social media platform in the midst of responding to a nuclear incident.

"Nuclear Regulatory Organisations, the Internet and Social Media" (NEA, 2014) goes on to note:

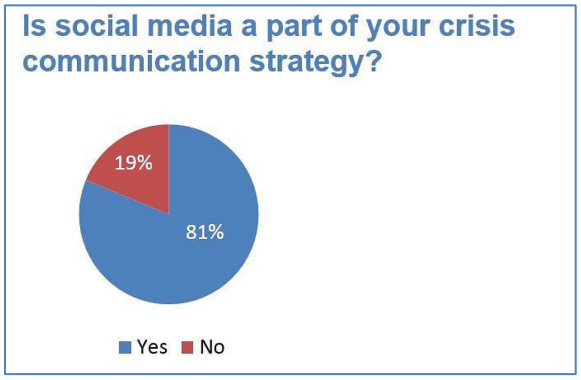
- The reaction time with social media is very short.
- Social media usage has increased the difficulty for regulators of communicating quickly and accurately.
- Social media platforms offer an opportunity to respond rapidly and to promote NRO messages.
- Social media do not replace traditional press relations (press releases, conferences, interviews).
- Social media can spread misinformation, rumours and polemics; active vigilance is thus required for monitoring.
- Re-tweeting, sharing, etc., multiplies impact of messaging.

Since the 2014 report was published, a variety of non-nuclear natural and man-made incidents underscored the vital role social media plays in both crisis communication and emergency communications. Hurricane Harvey response in the United States in 2017 is a case in point. According to CNN, hundreds of residents of the state of Texas, stranded by flood waters brought by the hurricane, posted on Facebook and Twitter, in some cases providing their addresses and their need for rescue. Enterprising volunteers organised rescue missions based on these social media posts (Stelter, 28 August 2017).

A University of San Francisco series of infographics showed the penetration of social media in the psyche of American disaster victims (University of San Francisco, 2013):

- 80% expect emergency response agencies to monitor and respond using social media;
- 75% contact friends via social media to make sure they are safe;
- 37% use info on social media to buy supplies and find shelter;
- 25% download disaster-related apps;
- 24% let loved ones know they are safe via social media;
- 18% retrieve emergency information on Facebook.

Given the global use of social media, residents of other countries may have the same or similar expectations for the use of social media during a crisis in their locality. NROs appear quite versed in the applicability of social media to crisis communication. Thirteen of 16 survey respondents with a social media programme, as well as the IAEA and the NEA, include social media as part of their overall crisis communication strategy.



CNSC, for example, noted in the survey that more residents now use social media tools to report emergencies or call for help, and expect government response agencies to be actively engaged in the technology as well. CNSC monitors social media and considers posting content depending on CNSC involvement and degree of media attention. The organisation will "pin" important posts on Twitter and Facebook to keep them on top of the platform stream; and in a real event would consider using Twitter or Facebook paid options. ASN reports it has used Twitter a few times in emergency situations and simulates its use during emergency drills.

According to the NRA, in case of an emergency and based on the Nuclear Emergency Response Guideline and manual, the organisation would automatically send information to Twitter and post videos to YouTube and Niconico (a video sharing service in Japan). These procedures are also confirmed in drills. The NRC noted that social media is fully incorporated into the organisation's crisis communication strategy and pre-written tweets and pre-prepared video Public Service Announcements for YouTube are ready to be posted if necessary. Many members noted they would use social media – in many cases primarily Twitter – to get information out quickly, including the Nuclear Safety and Security Commission of Korea (NSSC), the Authority for Nuclear Safety and Radiation Protection of the Netherlands (ANVS), STUK, NRPA, PAA, CSN, ENSI and SSM. Many members also noted the importance of monitoring social media in a crisis, particularly to identify rumours and misinformation that needed swift correction.

Case Study 9: Canada – Swift current transport accident

Regulator name and country: Canadian Nuclear Safety Commission (CNSC)

Platform name and link: Twitter: @CNSC_CCSN/@CCSN_CNSC; Facebook: Canadian Nuclear Safety Commission / Commission canadienne de sûreté nucléaire

Brief overview of the issue/activity: On 11 January 2016, a transport accident involving a truck carrying yellow cake occurred near Swift Current, Saskatchewan. While there were neither significant injuries nor risks to the public or environment, the truck tipped over and spilled some yellow cake onto the side of highway 4. The highway was closed while clean-up occurred and was reopened on 13 January. During this event, there was significant local, regional, and provincial media and social media coverage.

Approach and process: As soon as the Communications team was notified about the incident, we began monitoring media and social media coverage. Our approach was to wait for information from the licensee and our on-site inspectors before posting, or to post in response to information reported by news outlets so that people would have accurate, reliable, and timely information. Primarily, we used Twitter to both monitor and disseminate information. When posting, we used on-site pictures whenever possible to draw attention to our posts and to more effectively deliver our messages.

Details of implementation: The only costs associated with our social media approach were the costs of labour. We actively monitored and responded to the incident on social media starting on 11 January 2016 at 3:20PM (EST) until 13 January 2016 at 4:17PM (EST). During this period, we posted 11 times, clarifying information, summarising the events, and reassuring the public that the situation was being safely managed.

Outcome: Goal: Prevent confusion, deliver salient messages, be regarded as a trusted authority.

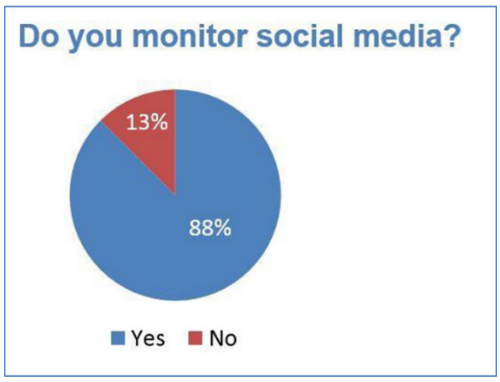
Result: Post-event analysis confirmed that there was little to no confusion or panic among the public. Our messages were effective and our tweets were even picked up in news articles. Media tended to quote CNSC key messages and relied on information disseminated by the CNSC.

Lessons learnt/recommendations:

- monitoring the social media public environment is key for successful communications;
- images significantly increase message salience and visibility on social media;
- openness and transparency on social media help improve public confidence.

How is social media monitored?

A majority of NROs report that they monitor social media, 14 of 16 with social media programmes, in many cases monitoring both their own and the social media content of others. Some NROs use their own tools or the tools inherent in some social media platforms to obtain quantitative information about reach, breadth, followers, shares, etc. Others may use contractors to collect, analyse, generate and provide that information to the NRO. Some NROs also monitor social media for "situational awareness," determining, for example, what conversations are taking place in social media that might have an impact on their organisation or their regulated industry. In some cases, but not all, the NROs might react to the information found during the monitoring of social media.



Those NROs doing regular assessments of followers and other key parameters on Facebook, Twitter and other platforms for reach, interaction, etc., include: FANC, STUK, BMU, STUK, PAA, Nuclear Regulatory Authority of the Slovak Republic (UJD), CSN, and ENSI. SSM does some of its own monitoring and outsources part.

CNSC noted that it uses Hootsuite, the official social media dashboard for Government of Canada use. To find social media content of interest, they are able to select keywords (nuclear safety, radioactive waste) and see content that includes those words. Hootsuite is augmented by monitoring on the actual platforms, i.e. Twitter, Facebook and YouTube and following influential/important accounts. Throughout the day, this content is shared with the whole organisation through a "Media Scan", which also includes traditional media coverage.

ASN currently uses Radarly, a data analysis tool developed by the Linkfluence agency, which provides data and allows the agency to listen to the social media conversation on topics of interest to the organisation. NRA outsources the assessments related to the recognition/publicity of NRA's official account, including basic information such as impressions, engagement, followers, etc. ANVS uses Coosto (a Dutch monitoring tool) to monitor social media in the Netherlands. The organisation receives daily updates and uses the tool to monitor current issues. The communications team selects items in newspapers and social media to spread among all ANVS staff on a daily basis.

NRPA uses the media monitoring tool Retriever to monitor other organisations, authorities, stakeholders or private person's activity on social media. NRPA noted that it "follows" dedicated topics/words and relevant tweets or posts, which are displayed in the social media feed on Retriever. They also use Twitter and Facebook's own analysis tools to monitor the activity on their official accounts, and produce quarterly reports on the activities i.e. number of mentions; new followers, etc.

The NRC uses a media monitoring contractor that monitors both traditional and social media daily. The social media results are included in a dashboard that the Office of Public Affairs reviews regularly (see Case Study 10 below).

Case Study 10: United States – Monitoring social media

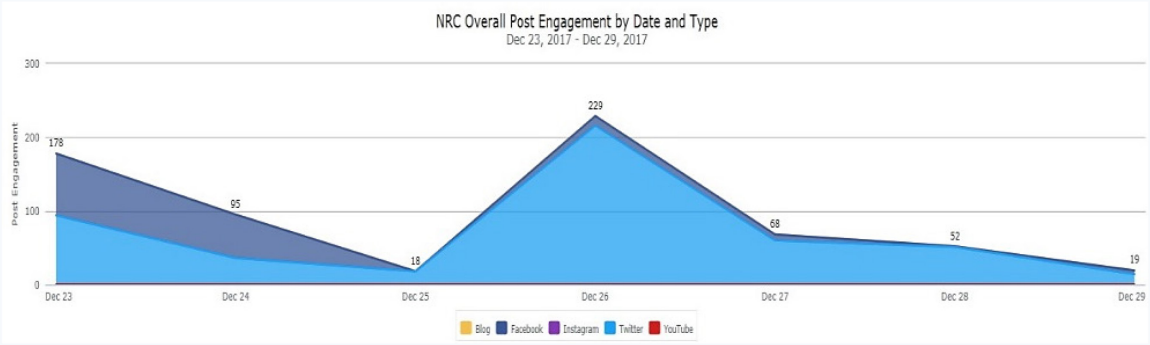
Regulator name and country: United States/Nuclear Regulatory Commission

Platform name and link: Internal/proprietary Social Media Dashboard

Brief overview of the issue/activity: The NRC contracts with a media monitoring firm to collect social media content and display it on an electronic "dashboard" for the Office of Public Affairs (OPA). The social media dashboard helps us maintain situational awareness by tracking social media conversations relevant to the NRC. Knowing what the public is talking about helps us develop content to address questions, concerns or misinformation, or to be prepared for media or Congressional inquiries. For example, one Twitter conversation asserted that NRC resident inspectors were restricted from accessing areas of a nuclear plant. To address the misinformation, we wrote a blog post explaining the inspectors have unfettered access at the plants to which they are assigned. OPA also tracked and reported on the social conversation surrounding an investigative series by the Better Government Association, giving staff real-time updates on the social conversation.

Approach and process: Designated OPA staff access the dashboard, reviewing data collected. Relevancy of information may be determined by the number or prominence of social users discussing an issue, whether an issue directly involves the NRC, or if a topic is believed to be of high importance to the agency. The dashboard is arranged primarily into two topic areas: General nuclear mentions and specific NRC mentions. These two broad topic areas can be further segmented into more specific topics, such as reactors, materials and waste, and security. Each of the specific topics has a list of key words and phrases developed by OPA and the contractor to capture the most relevant social conversations on Twitter, Facebook, blogs, YouTube and Instagram. Key words include radiation, nuclear power, Fukushima, spent fuel, uranium and cyber-attack. By far, the most relevant conversations occur on Twitter.

Ad hoc topics can be added at any time to monitor specific issues, such as an impending hurricane. Information in both categories can be filtered and sorted by date, social media post type (Twitter, Facebook, Blog, YouTube and Instagram) and number of impressions and engagements. Data can be displayed graphically (see figure 1) and textually. The tables provided (see figure 2) give basic statistical information – impressions (user's followers) and post engagements for both NRC and non- NRC generated content. Data can be exported in html or Microsoft Excel format.



Date	Author	Content	Topics	Tonality	Type	Impressions	Post Engagement
					(All)		
2017-12-26 00:00:21	Ionegreyhat	That's weird. THE Peter Strzok of anti-@realDonaldTrump fame sending records	NRC Mentions	Negative	Twitter	505	184
2017-12-23 22:42:06	CBS News	Nuclear Regulatory Commission downplays safety warnings, investigation finds Internal NRC surveys underscore a climate of fear among employees, a Better cbsnews.com	NRC Mentions	Neutral	Facebook	4,491,629	127
2017-12-26 14:14:36	GundaleSandeep	Sir there is Nuke in LasVegas Darling Tennis center staydium plz search stadium	NRC Mentions	Neutral	Twitter	70	37
2017-12-26 12:37:11	U.S. Nuclear Regulatory Commission -	NRC: Public Meeting Schedule Get ready for the new year by checking out our calendar for #NRC public meeti	NRC Mentions NRC Own	Positive	Facebook	4,028	15
2017-12-24 00:00:22	The Chicago Sun-Times	Nuclear regulator downplays safety warnings Internal surveys at the U.S. Nuclear Regulatory Commission underscore a clima	NRC Mentions	Negative	Facebook	386,231	13
2017-12-23 23:35:02	Suntimes	Nuclear regulator downplays safety warnings: Despite 700 employee complaints	NRC Mentions	Neutral	Twitter	446,774	13
2017-12-26 14:00:16	NNSANews	#NNSA report to @NRCgov is pivotal step to convert U.S. high-performance res	NRC Mentions	Neutral	Twitter	13,047	9

Details of implementation: The dashboard is part of a larger media monitoring contract, but costs approximately USD 20 000 a year. Other resources include designated OPA staff to monitor the dashboard as well as to work with the contractor to customise it.

Outcome: Initially the dashboard was acquired to provide an additional tool for aggregating and analysing social media data. The dashboard became a useful and customisable social media listening tool to augment situational awareness based on social conversations. Much of the data we can acquire from the social dashboard tells who is talking about us, what they are saying and their potential reach and prominence. We can track content we created for the social conversations it might spur, so we can effectively gauge the success of our social media efforts. However, on social media we talk much less than we are talked about, so the greater benefit of the dashboard is the ability to listen to the social conversations happening around us.

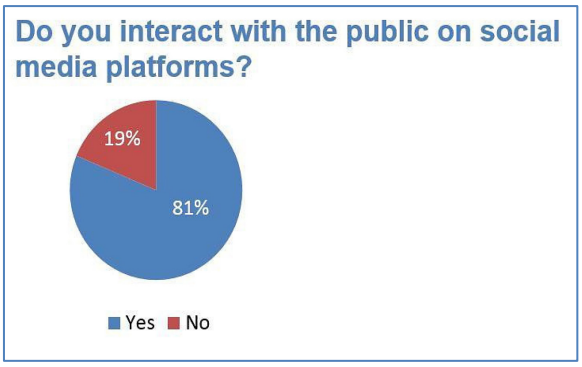
Lessons learnt/recommendations: We recommend working closely with a service provider to customise the dashboard. It's important to create a comprehensive list of key words and phrases to ensure conversations being tracked are relevant to organisation. The stats we collect within the platforms using the built-in analytics tools help us measure with granularity the effectiveness of our own social presence, while the information we capture on the social dashboard gives us an overview of what our stakeholders care about. The two monitoring platforms together provide us a balanced understanding of the social perception of nuclear-related topics and an ability to affect the conversation. Using a contractor to provide and customise this social listening apparatus relieved the NRC of purchasing the necessary infrastructure and dedicating staff to its set up and maintenance.

An additional question added to the survey after it was initially distributed was intended to assess not just monitoring reach, breadth, etc., but the effectiveness of the social media efforts. Seven of eight respondents who answered this question said they did monitor effectiveness. Monitoring the effectiveness of public relations messaging or informational/awareness campaigns is inherently difficult, often requiring costly and time-consuming "before and after surveys." Much of the media evaluation done by the NROs tends to lean more towards the quantitative – assessing whether content is received and/or spread – rather than the qualitative impact of the engagement and whether the content was understood or had any impact on viewpoint or perspective. However, CNSC noted that: "In addition to ongoing passive media monitoring, we also measure effectiveness through daily reviews, monthly analyses and annual reporting, and conduct follow-up assessment of the effectiveness of our coordinated social media campaigns."

How do NROs interact with the public on social media?

The majority of NROs using social media report they do have some interaction with the public on social media platforms (13 of 16), although the interaction ranges from limited to full engagement. CNSC interacts on three platforms – Twitter, Facebook and YouTube; interaction includes answering direct questions and correcting errors on the platform in which the content occurred. STUK responds if there are questions, rumours or false information, but not all questions are answered directly. ANS, ANVS, NSSC, ENSI, SSM and BMU answer direct questions. BMU also offers live interviews and regular podcasts to engage the social media audience.

Other NROs are more limited in their interaction. NRPA answers relevant questions on nuclear or radiological issues, but do not enter into debates or comment on statements of others. PAA noted that as general rule, they do not involve their official account in discussions with other users and respond solely to questions regarding safety and security. CSN interacts with followers on Twitter to clarify doubts about the nuclear or radiological issues or to answer messages related to the topic, but do not enter into debates or controversies. The NRC does not generally respond via Twitter nor Facebook to tweets or posts, nor do they allow comments on YouTube. They have, however, in the past responded with in-depth answers to comments and questions on their blog.



What content is posted to social media?

The NROs clearly provide a wide variety of content on social media, tailored to the specific platform, with LinkedIn typically reserved for job postings and recruitment information. Generally speaking, NROs provide via social media: news about the organisation, corporate information, job postings, information that provide nuclear-related education and awareness content, interesting facts and figures, information related to publications, requests for comments, activities and events including public meetings, agency legal/regulatory actions and decisions, news releases, publications, links to web pages, infographics, press announcements, awards and accolades for employees, and information about incidents/accidents. YouTube was specifically cited by some NROs as a location for videos of seminars, press events, conference, unique content, public service announcements and informational campaigns.

In short, NROs post a wide variety of information on all aspects of the organisation's mission and accomplishments, along with educational information to raise public awareness of general nuclear/radiological topics and underscores the credibility of the regulator. NROs clearly take into consideration the limitations and advantages, as well as the anticipated audiences, of various platforms to tailor content.

What are the benefits and challenges of social media?

The report "Nuclear Regulatory Organisations, the Internet and Social Media" (NEA, 2014) clearly articulated the benefits and challenges of social media use by NROs. As it noted: "The primary benefit of social media is the ability for regulators to reach out and talk directly to the public – and hear back – without the interpretation of a third party." (NEA, 2014: 9).

Years after the 2014 report, the benefits and challenges remain strikingly consistent. As noted by the NRC: "It is inconceivable at this point that our agency would not use social media to communicate. In reality, to avoid using such a direct method of communication to the public would be a disservice and reflect poorly on the agency's belief in and support of openness and transparency."

Other NROs in the survey reported benefits that include:

- reaching the media directly;
- offering additional avenues for demonstrating transparency and sharing impartial, balanced science-based information;
- offering the ability to offer a human voice for the organisation, leveraging trends and pop culture, offering explanations and context for complex topics and influencing the public about risks associated with nuclear/radiology;
- enhancing the quick dissemination of information during an emergency;
- boosting the reputation of an NRO, building relationships virtually and enhancing a positive image for the organisation;
- providing an additional way to bring news and information to journalists, and a vehicle for receiving and answering questions from the public;
- offering vehicles to reach a younger demographic of the public;
- providing the ability to hear what the public is saying and provide a timely feedback loop and minimise the spread of rumours and misinformation.

These positives are offset by significant, largely unavoidable challenges. As noted in the 2014 report, social media's negative consequences include: the rapid spread of misinformation, tremendous resources to establish and maintain the platforms and produce interesting and relevant content, and the challenge of meeting the demands of social media speed, which can mean communicators must function with less management oversight and less formality in their messaging. Other challenges as outlined in the 2014 report and echoed in the 2017-2018 survey also remain: a lack of resources, cyber security, and identifying appropriate content. One significant challenge not particularly highlighted in the 2014 report but noted by a number of NROs in the recent survey was the challenge of remaining above the "fray" and avoiding all-too-common social media debates, trolls and negative dialogue. FANC cited the negatives of "aggressive debates." ASN noted the challenge of adapting NRO communication to the "rules" of social media. CSN/Spain said it was imperative to "use the platform carefully so as not to stir debate or controversy." The NRC noted the challenge of dealing with the negativity of comments and sometimes extreme views posted, primarily on the blog and Facebook.

What is the status of NRO's usage of social media?

Not only did 16 of 17 NROs note they had at least one social media platform, but most felt support for and use of their social media platforms was growing. While 3 NROs reported adding platforms recently, 11 had no immediate plans to expand the social media platforms they currently used. Outliers include STUK, looking at adding Instagram and Periscope.

Platforms	# of respondents
Increased in last 5 yrs	2
Will increase in future	3
No plans to increase	11

A review of the comments in this section appears to reflect a general level of satisfaction among NROs with their current level of usage, and with the level of support for social media within the organisation. FANC noted the audience for its social media is growing; CNSC report an increase in followers/subscribers, especially after making the decision to engage with the audience. STUK noted its audience has grown moderately. ANVS noted that engagement with its social media accounts have been growing and it has added one platform, although it discontinued usage of Google+ for lack of followers. BMU said its social media programme has grown considerably in terms of interaction and audience, as well as with the additions of Facebook and Instagram. NSSC noted an increase in the number of shares and spreading of posts and other content, and looking to expand utilisation of YouTube. Both ANVS and NRPA noted growth in audience and both are considering adding platforms in the future. PAA noted steady growth on Twitter, UJD noted slow but steady increases, CSN, SSM and ENSI noted its audiences has grown substantially over the years. NRC noted it continues to assess other platforms but none are necessary to be added to the social media programme at this time. NRC also noted increased support for and awareness of the platforms being used.

Conclusion

Social media is an important tool – arguably essential – for nuclear regulatory organisations to use in communicating, both during periods of normal business and during an emergency. Social media usage rates and growth around the world point to these platforms continuing to be an important component of communication strategies in all industries and fields. This updated report also shows that constraints imposed by resources and the unique mission of NROs may continue to restrain the trajectory for organisations' more full exploitation of the benefits offered by social media platforms. In addition, it remains clear that not all countries will find the same platform useful and cultural norms will continue to influence NROs' selection of which platforms to use.

As noted in the beginning of this report, younger Americans have gravitated to Instagram and Snapchat for their news and information, a phenomenon unlikely to exist only in the United States. Yet, only one respondent to the WGPC survey used the former and none the latter. While younger social media users are likely still obtaining NRO information via other platforms, it bears repeating that nuclear regulatory organisations with an interest in providing content to younger stakeholders need to carefully review their social media portfolio to ensure they are being successful in that regard. Successful mechanisms for reaching younger audiences via social media might be a suitable topic for future WGPC attention.

The high level of management support and the reported successes in terms of audience is a positive sign that NROs around the world are increasingly seeking to use this tool to augment their overall communication strategy and, in some cases, to greatly expand their goals for their messaging into such areas as relationship and reputation building. The constraints, particularly those related to resources and the challenges of dealing with the sometimes "rough and ready" negative dialogue on social media, are likely to continue. NROs are sharing, and should continue to share, lessons learnt in both maximising the positive and minimising the negatives of social media. Lessons learnt related to reaching specific and unique audiences via social media – such as younger adults – should also be shared. As social media continues to evolve, it is likely this report, as with the first, will need to be revisited within five years.

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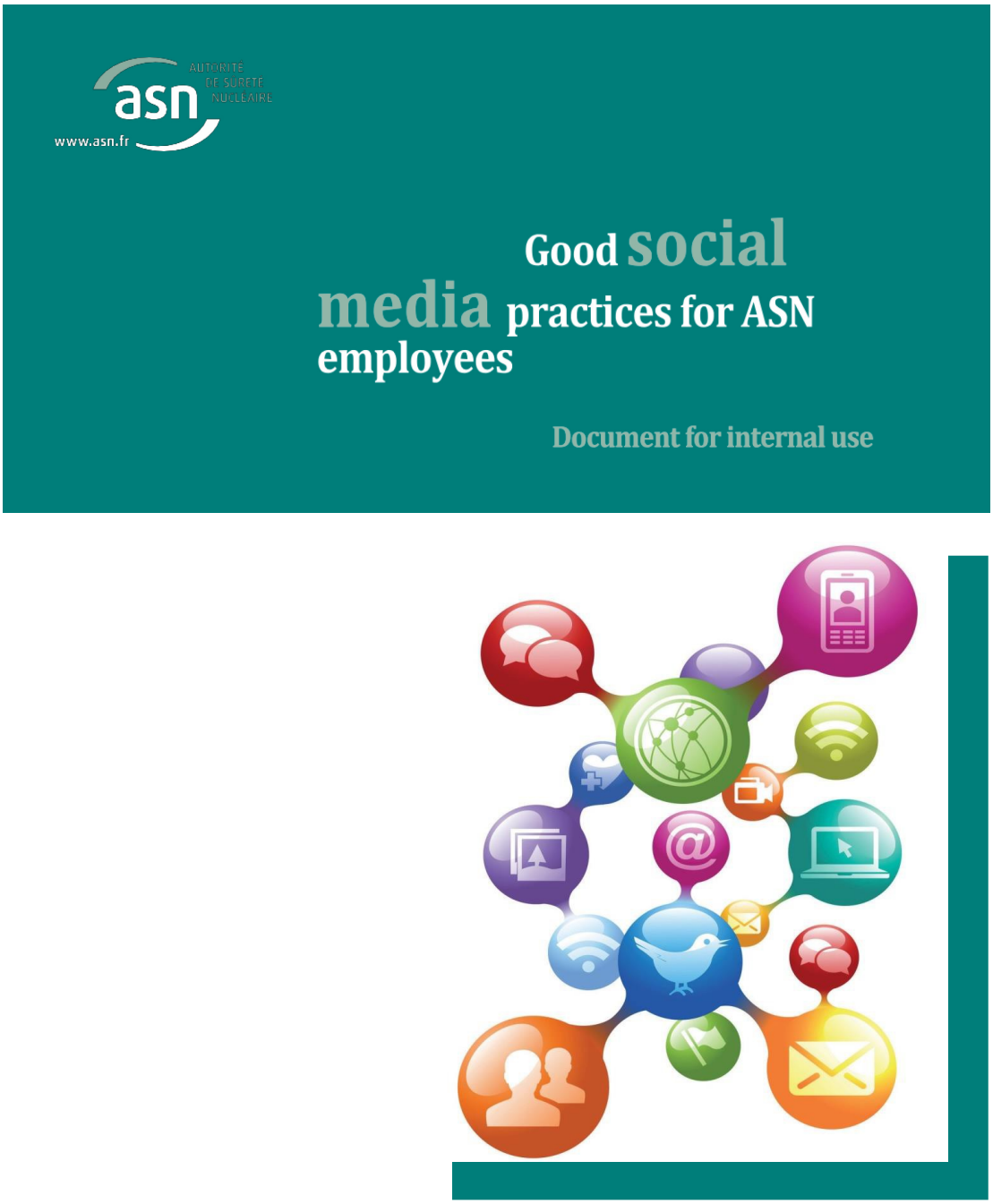
Annex: Good social media practices for ASN employees



ASN is present on these social media:

Twitter
https://twitter.com/ASN

Facebook
www.facebook.com/asn.fr

… and on the **video** sharing and streaming sites:

Dailymotion
www.dailymotion.com/ASN_Publications

YouTube
www.youtube.com/user/Suretenucleaire

LinkedIn
https://fr.linkedin.com/company/autorit

Who is this document for?

This document is intended for **all ASN staff members** who are in a position to participate in conversations and interchanges on the Internet (particularly on the social media) when they concern ASN, its activities or its employees, whether directly or indirectly.

Why have it?

The aim of this charter is to help you to **understand the functioning** of social media and enable you to grasp the implications and risks, for yourself and your employer.

This "User's Guide" and "Charter of Ethics" will enable you to optimise your use of social media when it concerns your activity at ASN in any way whatsoever.

You said "social media"?

The term "**social media**" designates a particular category of websites, blogs and collaborative forums on the Internet that are based on the participation of web users (comments, conversations, etc.), the creation of content by each user and the sharing or exchanging of this content. Today the "social media" concern millions of people and billions of content items, which are exchanged with a simple click, without the sender being informed of this.

Social media foster the **extremely rapid exchange** of information: this flexibility and speed of response must be used with caution. It is effectively important under all circumstances for ASN to stand back and take an objective view of the information it circulates, whatever the medium used.

ASN's Twitter account (@ASN) sees subscription "peaks" when crisis situations receive media attention, irrespective of how serious these situations are. The same goes for ASN's Facebook page, which allows it to reach a different audience to that addressed by the ASN website or its publications.

You and the social media

- **Remember** that even though the social media seem to foster fleeting content and immediacy of information management, **"Digital oblivion" does not exist**. Once you have posted content on the web it escapes your control and can be taken up by third parties, and remain "out there" indefinitely.
- **Be attentive** to **"virality"**, which is one of the facts of communication on social media: a message, a photo, or other content can be propagated extremely rapidly (like a "virus"!) in the social media, as they are "networked".
- **Respect** the rules of copyright and image rights in all your conversations and exchanges in the collaborative spaces (Facebook or Google+ pages, Twitter account, etc.). The rules of **intellectual property** apply on the social media in the same was as on any publication medium.
- **Be cautious with the use of geolocation** systems, which could interfere, without you realising it, with the places you visit in the course of your professional activities.
- **Be attentive** when setting your publication or privacy parameters (especially on Facebook).

What about the question of legal responsibility?

Social media such as Facebook, Twitter (and others) are host companies that provide "users" with spaces that allow them to disseminate or exchange any content at their discretion, in compliance with law. The users of these spaces are solely responsible for the content they disseminate. They are accountable for any offences that might be committed.

If an ASN employee posts content concerning their professional activities on their Facebook page or Twitter account, they must think about the consequences for ASN and the fact that ASN, as well as they themselves, could be held liable.

You, #ASN and the social media

1. The ASN has chosen the DCI (Communication and Public Information Department) to express the **official positions** of the ASN on the ASN's Twitter, Facebook, LinkedIn, etc. accounts.
2. You have information that seems interesting to you? Don't hesitate to **communicate it to the DCI** who will decide whether to disseminate it on the ASN social media.
3. Do not include your user name or your identifier, whether it is a pseudonym or not, or the **acronym "ASN"** or the name "Autorité de sûreté nucléaire" (French Nuclear Safety Authority). Do not use the ASN logo in the graphic design of your page: Only ASN has the right to use the logo or the acronym which designates it.
4. If you want to indicate that you work for the ASN in the brief description of your profile, we strongly recommend that, to avoid any confusion, you use the standard disclaimer **"my opinions (or my posts) are my own"**.
5. If you decide to indicate in your Facebook or Twitter profile that you **work for the ASN**, this means that you have chosen to be associated with ASN and will be "representing" the ASN, even without intending to. Be aware of the implications regarding your responsibility; think carefully before making "posts" or "tweets".
6. Remember that the search engines available to all Internet users make the effectiveness of any attempts to conceal your professional activities relatively uncertain. If you decide to comment on the activities of ASN, do so with complete **transparency**. Whatever the case, you are solely responsible for the information you post, for its quality, and for the relevance or timeliness of posting.

The rule of virality is especially true when **the crisis**, the emergency or the controversy intensifies interchanges: be careful before joining a conversation on a "hot" issue where the fact that you work for the ASN, whether stated or not, could confuse the messages.

7. Maintain **professional secrecy** concerning your activities and those of the ASN. If you see rumours or incorrect information concerning the ASN circulating, inform DCI.
8. Before passing on information that you have received in the exercise of your professional activities or concerning these activities, **ask yourself** whether it is appropriate or timely to do so: has the ASN already communicated on this subject? Is it not too early for you to do so? If necessary, ask DCI and/or your superiors, particularly where sensitive information is concerned.
9. It is preferable not to publish images that involve your work colleagues or contacts (licensees, medical centre personnel, etc.) or to **disclose information** gathered during your interchanges with stakeholders in the exercise of your activity at the ASN.
10. Observe **copyright law**: even if sharing content is the rule on the social media, where photos and videos in particular are very easily exchanged, be careful to ensure that the photos do not concern protected facilities or persons who would not wish to be included in exchanged content. As a precaution, use ASN's internal vectors (mail, Siv2, etc.) to exchange files specific to your professional activity with your colleagues.
11. If you decide to make public your connection with ASN and if you so wish, do not hesitate to **contribute** to the visibility of ASN's communication means by including links to the website www.asn.fr, hashtags (#ASN) or by mentioning the ASN Twitter account (@ASN) in your conversations!

Who "tweets" at the ASN?

The DCI makes regular use of Twitter, which enables it to maintain an effective watch over the information concerning the ASN (and its activities), to disseminate its publications to a wide audience and, in certain cases, to express ASN positions directly ("live tweets" during parliamentary hearings or press conferences, direct responses in crisis situations, etc.).

DCI shares its news on Facebook

The ASN's Facebook page enables it, for example, to promote its publications and the Information Centre exhibitions (portfolios, audiovisual content, etc.) or to announce meetings between the ASN and the public. It also enables it to disseminate press articles that mention the ASN, or to relay radio or television broadcasts in which ASN spokespersons participate.

ASN does not want to regulate its employees' private use of the social media, but to **alert** them to a few rules to ensure responsible and informed usage, so as to avoid any confusion that could be prejudicial to both them and the ASN.

Proliferation of information…

Information proliferates on the social media; it exists in many forms (photos, films, comments, shared texts, personal pages, etc.) and **circulates very easily**, which is an opportunity for virtually instantaneous dissemination of messages. The presence of the ASN and its employees on the social media serves to promote the ASN's missions, positions and expertise.

… the need to stand back

However, once posted, the information **escapes the control** of the person who issued it: "carried off" to another page, or retweeted in someone else's account (someone who can add a critical comment); on the social media, the content of information can be reused and distorted, **misappropriated**, quoted incompletely or out of context, etc.: these processes, which are the very essence of the social media, can also be used to **change the initial meaning** or intention.

Responsible and informed usage

The activities and missions of the ASN require it to ascertain the **reliability** of the information issued in its name. ASN staff must be aware that if they use social media in ways that concern their professional activity or are linked in any way whatsoever to the activities of the ASN, they must do so **knowingly**.

Remember this!

The ASN has chosen to have a single point of information dissemination on the social media.

The DCI alone can express views on the "official" and certified ASN accounts such as Twitter and Facebook, and on the ASNs' YouTube and Dailymotion channels.

You have information that seems interesting to you? Don't hesitate to communicate it to the DCI who will decide whether to disseminate it on ASN social media.

Duty of discretion

In the French public civil service, the duty of discretion "prohibits public officials from using their function as the instrument of any propaganda whatsoever". It is specified in Article 19 of the ASN Internal Rules of Procedure* that "the disclosure of secret information is liable to the criminal penalties set forth in Articles 226-13 and 432-9 of the Penal Code. Commissioners and ASN staff are bound by a duty of discretion, in particular under the professional confidentiality obligation mentioned in Article 26 of ***Act 83-634 of 13 July 1983 on the rights and obligations of public officials. Under this obligation, interested parties may not disclose information that comes to their attention in the exercise of their duties, except for the needs of their office and in cases where third parties are acknowledged to have a right of access to secret information, and may not divert official documents or communicate them to third parties. Commissioners and ASN staff shall ensure that they do not circulate information or take public positions that could adversely affect ASN.***

* ***ASN resolution 2010-DC-0195 of 19 October 2010, establishing the ASN Internal Rules of Procedure***

Some reference texts

- → Act 78-17 of 6 January 1978 relative to computing, files and liberties;
- → Act 82-652 of 29 July 1982 on audiovisual communication;
- → Act 2004-575 of 21 June 2004 regarding confidence in the digital economy;
- → The national interprofessional agreement of 19 July 2005 on teleworking;
- → Act 2009-1572 of 17 December 2009 relative to the fight against the digital divide.

Glossary

- **Subscriber** ("follower" in the Twitter environment): designates the people who have a Twitter account and have subscribed to your account. The user name (or account name) is preceded by the "at" (@) sign (example: @ASN).
- **Friend**: (in the Facebook environment): a person with whom you have contact and with whom you might exchange content.
- **E-reputation**: or "web-reputation" designates the level of visibility of ASN (its image, the image of its spokespersons, its missions, its daily work and its communication) in the social media and on the Internet in general.
- **Like**: a button that enables you to approve the content displayed by a third party. Your appreciation is visible on this third party's page.
- **Social media or networks**: websites on which the content is generally public, but access and posting are restricted, requiring the creation of a user account. Each social network user has a profile and posts their own content. The members are linked through "groups" ("hubs", "channels", etc.). Examples of social networks and media: Facebook, Twitter, Viadeo (France), LinkedIn, YouTube, Dailymotion, etc.
- **Post**: designates a publication in a Facebook page, and its use has extended to many other social media (one talks of "posting", that is to say publishing).
- **Pure player** or **pure-play company:** designates companies that operate only on the Internet (purely e-commerce companies or media that only exist on the Internet and not in print).
- **Retweet ("RT")**: the act of forwarding to one's own subscribers a message ("tweet") sent by a third party. If a piece of information posted on Twitter is "retweeted" by a sender who has several hundreds of thousands of followers (as is the case with Greenpeace for example), the benefit in terms of dissemination of the information is very significant.
- **Tweet**: a message of 140 characters at the most, used in the Twitter environment. It can include photos and video, and a link to a fuller page. The message syntax often uses the "hashtag" (#) sign: terms prefixed with the hashtag sign can be indexed to facilitate searches on this one term in the Twitter engine and to transfer the information more rapidly.