DIGICOM – an unprecedented collaboration on the dissemination and communication of European statistics

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**Keywords:** Communication, experimental statistics, gamification, multipliers, open data

# Introduction

The European Statistical System (ESS) is the partnership between the statistical authorities of the EU Member States, EFTA countries and Eurostat. In May 2014, the European Statistical System Committee (ESSC) adopted the [ESS Vision 2020](https://ec.europa.eu/eurostat/web/ess/about-us/ess-vision-2020) [1], a common strategic response of the ESS to the challenges that official statistics is facing. It was founded on a clear need agreed by all members of the ESS to modernise the production and communication of European statistics to ensure that the ESS remains competitive in the future, and covers five [key areas](https://ec.europa.eu/eurostat/web/ess/about-us/ess-vision-2020/key-areas):

1. Identifying user needs and cooperation with stakeholders
2. Quality of European statistics
3. New data sources
4. Efficient and robust statistical processes
5. Dissemination and communication on European statistics.

By mid-2015, the ESS Vision 2020 [implementation portfolio](https://ec.europa.eu/eurostat/web/ess/about-us/ess-vision-2020/implementation-portfolio) comprised seven projects, well covering key areas (2), (3) and (4). However, by design, none of those projects focused on the (1) user needs or (5) dissemination and communication key areas. To meet the need to cover those key areas, the *Digital communication, User analytics and Innovative products* (DIGICOM) project was designed.

The [business case](https://europa.eu/%21Jp68KF) of the DIGICOM project was rapidly developed in a highly collaborative way, with a task force (co-chaired by Eurostat and Statistics Belgium, and including 12 ESS member organisations) actively contributing to its drafting, and a number of ESS forums reviewing it. Thanks to this intensive and inclusive approach, it could be presented to (and endorsed by) the ESSC in November 2015, ahead of schedule.

The DIGICOM project relies upon various prior achievements of the official statistics community – such as the already well-established principle of disseminating all statistical data free of charge (introduced in 2004 at Eurostat [2], to take but one example), and a long tradition of promoting statistical literacy [3]. One novel aspect of DIGICOM was that is represented a major joint collaborative undertaking (among nearly all members of the ESS) to modernise dissemination and communication. Moreover, building upon pre-existing developments, new and innovative results were achieved (detailed in 3 below).

# Methods

## Collaborative approach

The ESS Vision 2020 project ran for the period 2016-2019 and carried out a rich and varied portfolio of activities in a highly collaborative way, as outlined below. Taken together, it is estimated that at least 100 individual colleagues – from well over ¾ of all ESS member organisations – participated actively in the DIGICOM project.

The overall coordination of the project was managed by the Eurostat Project Manager, overseen by the DIGICOM Steering Group, with 12 ESS National Statistical Institutes (NSIs) as well as the European Statistical Advisory Committee (ESAC) represented, with the Project Owner (the Director of Eurostat Directorate B) serving as the chair.

At the operational level, the work was distributed among four work packages (WPs): user analysis; innovative and shareable products and tools; open data dissemination; communication and promotion. There were 10-15 NSIs participating in each WP team, with Eurostat in a coordinating role.

Additionally, groups of member organisations of the ESS collaborated within specific co-financed endeavours, most notably the [*Linked Open Statistics* ESSnet](https://ec.europa.eu/eurostat/cros/content/essnet-linked-open-statistics) and the [*European Statistics Competition*](https://ec.europa.eu/eurostat/cros/DIGICOM/European-Statistics-Competition)[4].

## Agility

The [DIGICOM business case](https://europa.eu/%21Jp68KF) explicitly foresaw the project to be agile, revising project objectives and re-prioritising among the actions. Accordingly, there was a dynamic shift in the project scope, with certain aspects (such as [search](https://ec.europa.eu/eurostat/cros/DIGICOM.D3.15) and [extraction](https://ec.europa.eu/eurostat/cros/DIGICOM.D3.08) tools and an [ESS communication strategy](https://ec.europa.eu/eurostat/cros/DIGICOM.D4.02)) being shrunk or not achieved due to issues linked to resources, uptake or strategic choices and other activities being achieved by other means than originally foreseen.

Most importantly, however, certain activities were given a *vastly increased importance* in relation to what was previously foreseen, in particular concerning statistical literacy and outreach (as further detailed in Section 3 below).

# Results

The DIGICOM deliverables, which all are (together with the DIGICOM final report [5]) [available in the public domain](https://ec.europa.eu/eurostat/cros/content/digicom-results), include:

* An enlarged ESS ***product portfolio*** (co-developed [digital publications](https://ec.europa.eu/eurostat/cros/DIGICOM.D2.01); [public use files](https://ec.europa.eu/eurostat/cros/DIGICOM.D3.12); [experimental statistics](file:///%5C%5Cnet1%5Chomes%5C126%5Ckarlbma%5CMy%20Documents%5CKARLBMA%5CPublikationer%5CNTTS2021%5CDIGICOM.D4.15)).
* A wide range [of ***statistical literacy*** products](https://ec.europa.eu/eurostat/cros/DIGICOM.D4.09) (many of which are disseminated via the [Education corner](https://ec.europa.eu/eurostat/help/education-corner/)), including [games](https://ec.europa.eu/eurostat/cros/DIGICOM.D4.07) [6], e-learning material ([STEDy](https://stedy.hr/) and [Statistics Online](https://statisticsonline.eu/)) and educational videos (for a [Massive Open Online Course](https://ec.europa.eu/eurostat/help/education-corner/videos) as well as for [teachers and students](https://ec.europa.eu/eurostat/help/education-corner/teachers-and-students)).
* Various ***outreach*** activities, including the *[European Statistics Competition](https://ec.europa.eu/eurostat/cros/DIGICOM/European-Statistics-Competition)* [4], [social media platforms](https://ec.europa.eu/eurostat/cros/DIGICOM.D1.06) for [advanced](https://ec.europa.eu/eurostat/web/ess/forum) and [potential](https://www.facebook.com/EuropeanStatistics/) users of European statistics, [the *Power from Statistics*](https://ec.europa.eu/eurostat/cros/powerfromstatistics/) initiative [7] and [outreach to multipliers](https://ec.europa.eu/eurostat/cros/DIGICOM.D4.03) (data journalists, NGOs, researchers and teachers).
* ***Tools***and***prototypes*** *–* for use by ESS practitioners – including [user personas](https://ec.europa.eu/eurostat/cros/DIGICOM/userPersonas), [visualisation tools](https://ec.europa.eu/eurostat/cros/DIGICOM.D2.15), linked open data (LOD) reference and solution [architectures](https://ec.europa.eu/eurostat/cros/DIGICOM.D3.02), an [LOD prototype](https://ec.europa.eu/eurostat/cros/DIGICOM/LOD2019), a [semantic format converter service](https://ec.europa.eu/eurostat/cros/DIGICOM.D3.05) and the [Linked Open Statistical Data hub](https://losd-data.staging.derilinx.com/).
* ***Studies*** on e.g. [branding and communication](https://ec.europa.eu/eurostat/cros/content/analysis-user-perception-and-communication-official-statistics-eu), [user profiling](https://ec.europa.eu/eurostat/cros/content/digicom-user-profiling-exercise-final-report) and [linked open data](https://ec.europa.eu/eurostat/cros/DIGICOM/LODrequirementsFinalReport)
* ***Guidelines***[[2]](#footnote-2) and ***recommendations*** on topics such as [user research, user personas and user analytics](https://ec.europa.eu/eurostat/cros/DIGICOM-guidelines-userAnalyticsResearchPersonas), [usability](https://ec.europa.eu/eurostat/cros/DIGICOM-usability-guidelines), [social media](https://ec.europa.eu/eurostat/cros/content/social-media-guidelines), [visualisation](https://ec.europa.eu/eurostat/cros/content/guidelines-sharing-visualisation-tools-between-nsis), [LOD requirements and LOD portals](https://ec.europa.eu/eurostat/cros/content/recommended-losd-service-implementation-nsis-ess).
* ***Strategies***2on e.g. [outreach to data journalists](https://ec.europa.eu/eurostat/cros/content/data-journalist-outreach-strategy), [linked open data](https://ec.europa.eu/eurostat/cros/content/item-09-ess-roadmap-lod-linked-open-data-state-play) and [public use files](https://europa.eu/%21VC78yb).
* ESS-wide ***inventories***on topics such as [user analysis](https://ec.europa.eu/eurostat/cros/DIGICOM.D1.01), open data dissemination (including [search and extraction tools](https://ec.europa.eu/eurostat/cros/DIGICOM.D3.07) as well as [(linked) open data](https://ec.europa.eu/eurostat/cros/DIGICOM.D3.01)), [communication](https://ec.europa.eu/eurostat/cros/content/digicom-inventory-communication-strategy) and [promotion](https://ec.europa.eu/eurostat/cros/content/digicom-inventory-outreach-practices) (including [statistical literacy](https://ec.europa.eu/eurostat/cros/DIGICOM.D4.08)) and [visualisation](https://ec.europa.eu/eurostat/cros/DIGICOM.D2.11)

The project also conducted a number of ESS internal *experience sharing*, co‑creation and awareness-raising exercises. This includes e.g. hackathons on [Big Data](https://ec.europa.eu/eurostat/cros/DIGICOM.D4.06) (jointly with the ESS Vision 2020 project on Big Data) and [Linked Open Data](https://ec.europa.eu/eurostat/cros/DIGICOM.D3.10), as well as ESS workshops on [visualisation](https://ec.europa.eu/eurostat/cros/DIGICOM.D2.12), [data journalism](https://ec.europa.eu/eurostat/cros/DIGICOM/ESS-event-on-Data-Journalism), [social media](https://ec.europa.eu/eurostat/cros/content/ess-social-media-event-programme), [user research](https://ec.europa.eu/eurostat/cros/content/ess-user-research-event-programme) and [linked open data](https://ec.europa.eu/eurostat/cros/DIGICOM.D3.10).

# Discussion

## Networking is ever more important – and co-creation pays off

DIGICOM has really been a joint venture – and this in an ESS area that (in contrast to e.g. methodology) does not have a long-standing tradition of joint endeavours of this nature. Common activities (and frequent face-to-face meetings) have led to the establishment of new professional networks, making it easier for colleagues in ESS NSIs to reach out to, and thereby draw on the expertise of, like-minded specialists at other NSIs. These networks need to be nurtured in an efficient way.

Many of the DIGICOM elements have an element of co-creation (involving colleagues from Eurostat and NSIs during all stages), with the *European Statistics Competition* [4] perhaps being the foremost example. This approach resulted in:

* general buy-in and acceptance at the inception stage
* a preparedness to actively participate in development and review activities
* a greater uptake of deliverables (voluntary translation etc. – for instance of the ESS digital publication [*The life of women and men in Europe*](https://ec.europa.eu/eurostat/cros/DIGICOM.D2.01) [8] and the [*Virtual Reality for Official Statistics* (ViROS)](file:///%5C%5Cnet1%5Chomes%5C126%5Ckarlbma%5CMy%20Documents%5CKARLBMA%5CPublikationer%5CNTTS2021%5Cec.europa.eu%5Ceurostat%5Ccros%5CViROS) app), leading to their widened deployment.

## Sharing is worthwhile, but challenging

A key approach of the DIGICOM project is *sharing*. To take but a few examples:

* The *European Statistics Competition* (ESC) would never have gotten off the ground if INE Spain had not shared their platform and know-how with the rest of the ESC NSIs.
* The [Statistics Online](https://statisticsonline.eu/) e-learning portal was made possible by DESTATIS sharing their content and structures with Eurostat.
* A number of ESS members share the code/design of their [games](https://ec.europa.eu/eurostat/cros/DIGICOM/national-statistical-literacy-products) with other NSIs.
* Code and containers for the [Linked Open Statistical Data](https://ec.europa.eu/eurostat/cros/DIGICOM.D3.06) service are available online.

However, sharing is not without challenges. Some issues (potential and encountered) include intellectual property right issues, adaptation issues because of local technical (or linguistic) differences and regulations, increased requirements for documentation and/or standardisation imposed on the ‘donor’ ESS member, requirements for translation, localisation, correction – and adaptation to local production processes – at the end of the ‘receiving’ ESS member.

There is also a risk that the ‘donor’ ESS member becomes excessively solicited for ‘after-sharing support’. Moreover, sharing may increase dependency of ‘receiving’ ESS members on externalities, leading to business continuity risks in case core dissemination processes rely on shared solution.

Whether sharing is worth the effort enabling it may thus vary from case to case – and the relationship between effort/utility and risk/reward should (to the extent that it is possible) be assessed prior to major efforts being committed.

## Conclusion

The DIGICOM project constituted a major joint investment by a large number of ESS NSIs. Although it was conceived in 2015, prior to the most recent surge in public attention to the ‘fake news’ phenomenon, DIGICOM presciently included the promotion of, and the communication of the value of, European statistics as a reliable basis for evidence-based decision-making and an unbiased picture of society. Through various outreach and statistical literacy activities, the project has clearly delivered in this regard.

While DIGICOM by design included elements of experimentation, the project did – thanks to its collaborative approach – achieve a wide range of successful deliverables, including an expanded portfolio of products, and a number of ESS ‘firsts’. Thereby, DIGICOM has made a considerable contribution to the future-proofing of European statistics.

As outlined in 2.2 above, a few of initial objectives were not achieved for various reasons, and remain to tackle for the official statistics community in Europe and beyond.

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1. Martin.Karlberg@ec.europa.eu [↑](#footnote-ref-1)
2. It is important to note that the various guideline and strategy documents developed by the DIGICOM project are at different stages of validation – some have been adopted by the relevant ESS forum, whereas others are merely proposals that serve to inform discussions on the topic. [↑](#footnote-ref-2)