



# IRIS

Integrated and Replicable Solutions  
for Co-Creation in Sustainable Cities

<b>Project Acronym:</b>	IRIS
<b>Project Full Name:</b>	Integrated and Replicable Solutions for Co-Creation in Sustainable Cities
<b>Grant Agreement:</b>	No 774199
<b>Project Duration:</b>	5 years (starting 1 October 2017)

## Deliverable 10.4

### Interim social media and content distribution monitoring report

<b>Work Package:</b>	WP 10: Communication and Dissemination
<b>Task:</b>	T10.4: On and offline communications backbone
<b>Lead Beneficiary:</b>	ESCI
<b>Due Date:</b>	31 March 2020 (M30)
<b>Submission Date:</b>	15 May 2020 (M32)
<b>Deliverable Status:</b>	Final
<b>Deliverable Style:</b>	R
<b>Dissemination Level:</b>	PU
<b>File Name:</b>	D10.4_Interim_social_media_and_content_distribution_monitoring_report.pdf



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 774199



## Authors

Surname	First Name	Beneficiary
Tsarchopoulos	Panagiotis	CERTH
Kamadanis	Nikos	CERTH
Walker-Love	Alec	ESCI

In case you want any additional information or you want to consult with the authors of this document, please send your inquiries to [irissmartcities@gmail.com](mailto:irissmartcities@gmail.com).

## Reviewers

Surname	First Name	Beneficiary
Massink	Roel	UTR

## Version History

Version	Date	Modifications made by
0.1	26/2/2020	ESCI provides overall statistics
0.2	27/4/2020	CERTH includes detailed statistics from website and social media accounts
0.9	14/5/2020	Detailed analysis of the statistics
1.0	15/5/2020	Final version

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# Executive Summary

The deliverable D10.4 (Data and analysis of the reach and influence of online activities) presents the outcome of the IRIS project's online activity until month 30 and recommendations on how to improve its digital strategy. The IRIS Communication and Dissemination (C&D) strategy was initially presented in the deliverable D10.1 (Communication and dissemination plan with conference agenda) and was updated in D10.10 (First update of communication and dissemination plan). The C&D aims to create awareness, understanding and action among targeted audiences. It contains a mix of compelling content and proactive use of online, offline and face-to-face opportunities aiming to make the project visible, credible and inspirational.



A modern and dynamic website (<https://irissmartcities.eu>) that moves away from being a repository and towards being a 'digital anchor' for IRIS content is the main pillar of the dissemination and communication strategy. Priority is given to an easy to update and well-connected website with IRIS content featured in the media or sectorial sites, twitter feeds, interviews and blog posts front and centre. The website had 19.020 visitors during the first half of the project.

IRIS project has established a strong presence in the social media space as it is active in Twitter, LinkedIn, YouTube, SlideShare, ResearchGate and Instagram. The project uses the unique characteristics and audiences of each platform to distribute specific content better and connect with influencers. Twitter is the flagship platform in social media, where the @IRISsmartcities account has more than 1.000 followers and 750.000 impressions. Apart for Twitter, IRIS is also popular in the other platforms with 523 followers and 45.789 impressions in LinkedIn; 3.052 video views in YouTube's interviews and webinars; and 52.053 views in SlideShare's presentations and infographics.

The IRIS project achieved its C&D goals for the reporting period, as it managed to establish its presence in the field of smart and sustainable cities (be visible) and to exploit the achieved results so far by distributing more editorials, articles and deliverables (be credible). Based on a successful start, IRIS will be able to achieve the main C&D goal for the 2<sup>nd</sup> half of the project that is to be a source of knowledge and inspiration in the field of smart and sustainable cities.



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## Abbreviations and Acronyms (in alphabetical order)

Abbreviation	Definition
C&D	Communication and Dissemination
CC	Creative Commons
CIP	City Information Platform
CMS	Content Management System
EU	European Union
ICT	Information Communication Technology
LH	Lighthouse
PR	Public Relations
RES	Renewable Energy Sources
ROI	Return on Investment
SCC	Smart Cities and Communities
VNR	Video News Release
WP	Work Package



# 1. Introduction

## 1.1. Scope, objectives and expected impact

The deliverable D10.4 (Data and analysis of the reach and influence of online activities) contains an analysis of the project's online activity and recommendations on how to improve its digital strategy. The deliverable is part of the task T10.4 (On and offline communications backbone). This task contains the creation of both online and offline tools (i.e. website, social media accounts, printed materials, academic publications, etc.) that will serve the project and will be used by the partners to bring visibility and consistency to dissemination and communication efforts. However, only the results of online activities are reported to D10.4.

The deliverables D10.1 and D10.10 (Communication and dissemination plan in month 1 and 12) give the framework of the project's online communication and dissemination activities. The communication and dissemination plan is administered by a central communication and dissemination secretariat, who focus on engaging European and international audiences. Lead local correspondent(s) in each city ecosystem interact with their partners and the secretariat to develop locally effective actions, respectful of culture, language and objectives. Communication and dissemination are essential activities throughout the IRIS project lifestyle.

The document presents the results of the IRIS communication and dissemination activities in the following online channels:

- Project website available at <https://www.irissmartcities.eu/>
- Twitter account available at <https://twitter.com/IRISsmartcities>
- LinkedIn page available at <https://www.linkedin.com/company/27090842/>
- YouTube channel available at [https://www.youtube.com/channel/UCVZPWV3\\_lx4xF1aXItY9E8w/](https://www.youtube.com/channel/UCVZPWV3_lx4xF1aXItY9E8w/)
- SlideShare account <https://www.slideshare.net/IRISSmartCities>
- Instagram account available at <https://www.instagram.com/irissmartcities/>
- ResearchGate page available at <https://www.researchgate.net/project/IRIS-Co-creating-smart-and-sustainable-cities>

The above list shows the broad field of IRIS online communication and dissemination activities.

## 1.2. Relation to other tasks and deliverables

D10.4 is related to all WP10 activities, as they produce content for the IRIS website and social media accounts. The deliverable will help them to improve their digital strategy.

## 1.3. Deliverable Structure

The current document is organised in the following chapters:

**Chapter 1** is the introduction



**Chapter 2** present the methodology of the project's online approach, as well as the monitoring tools and the metrics that are used.

**Chapter 3** presents the impact of the IRIS activities in the project's seven online channels (i.e. website, Twitter, LinkedIn, YouTube, SlideShare, ResearchGate and Instagram).

**Chapter 4** presents the conclusions.

**Chapter 5** contains the references to external sources used in the document.

## 2. Methodology

### 2.1. Principals of the online approach

The IRIS Communication and Dissemination (C&D) strategy was initially presented in the deliverable D10.1 Communication and dissemination plan with conference agenda (IRIS Project, 2017) and was updated in D10.10 First update of communication and dissemination plan (IRIS Project, 2018). The C&D aims to create awareness, understanding and action among targeted audiences. It contains a mix of compelling content and proactive use of online, offline and face-to-face opportunities.

Video, visuals, social media content, journalistic articles, citizen journalism and news releases are some of the planned activities to bring the project's story and personalities to life. The IRIS C&D secretariat applies a 'networked distribution' premise, privileging proactively placing IRIS content on websites, blogs, social and mass media (re)creating communications opportunities from zero. IRIS goes where target audiences are, rather than passively expect them to come to us. It is expected that the lead C&D contact points in each city ecosystem will also adopt this proactivity.

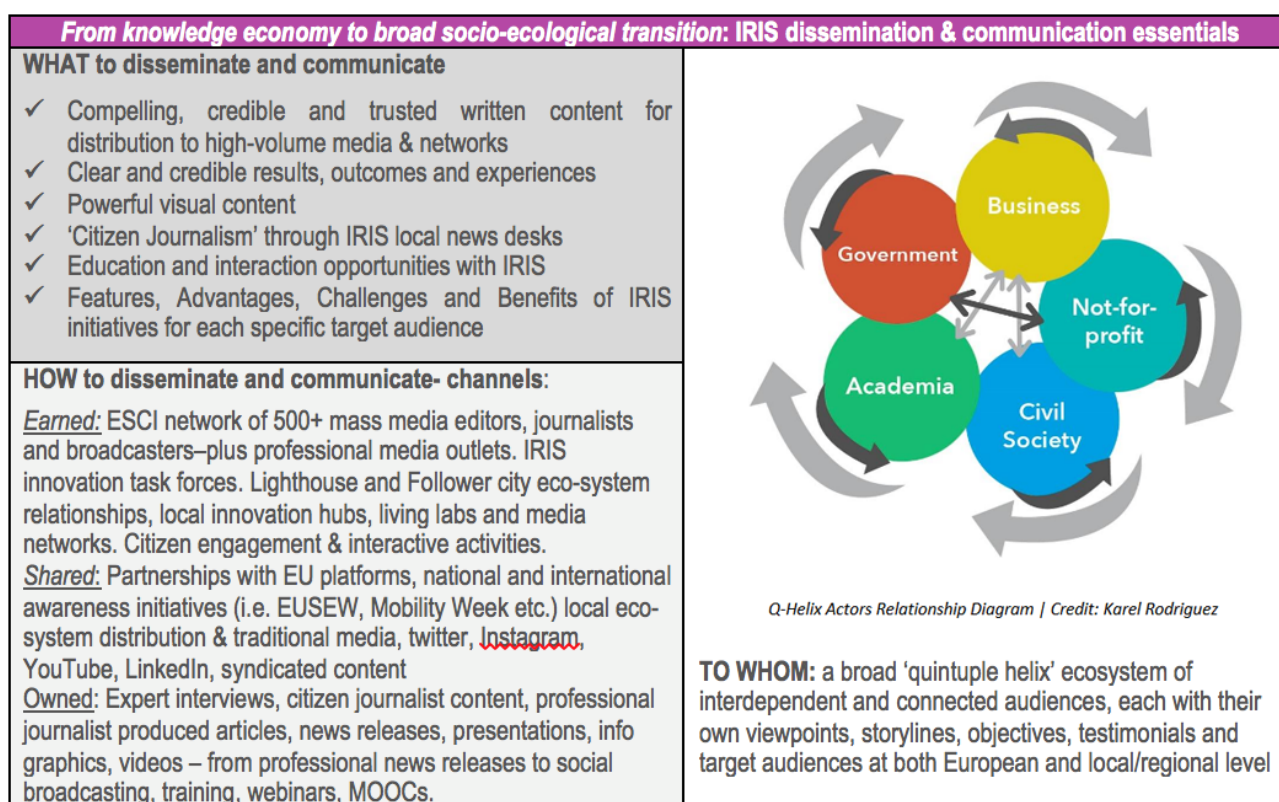


Figure 1 – Overview of the IRIS communication and dissemination principals (IRIS Project, 2018)

With a content-focused approach, IRIS explores a mix of Paid, Earned, Shared and Owned media, known as the 'PESO model' (Dietrich, 2014). As a research and demonstration project, IRIS is particularly rich in 'Owned' content and 'Shared' media. Communication and dissemination actors across the project



prioritise, bringing IRIS insights to a broader audience and leveraging their personal, professional and institutional networks.

Online IRIS “Owned” media – such as LinkedIn company page, Twitter feed, SlideShare and [irissmartcities.eu](http://irissmartcities.eu) – **inform** dissemination targets with easily accessible and up to date content on project aims, progress and key contextual issues and challenges.

“Earned” media taps into the PR, investor and influencer engagement of WP10 lead ESCI at a European level and local C&D leads in each city. IRIS also considers paid media in the form of sponsored tweets and Facebook posts if it helps the C&D action meet an objective.

IRIS C&D approach aims to make the project visible, credible and inspirational (Figure 2):

**Visible (1<sup>st</sup> year):** The project establishes its presence in the field of smart and sustainable cities.

**Credible (2<sup>nd</sup> year):** The project creates more editorial/distribution and more deliverables to be able to ‘unpack’ and exploit.

**Inspirational (3<sup>rd</sup> – 5<sup>th</sup> year):** The project produces results, awards, achievements and peer-to-peer (for both experts & citizens) seeing “we can do this”.

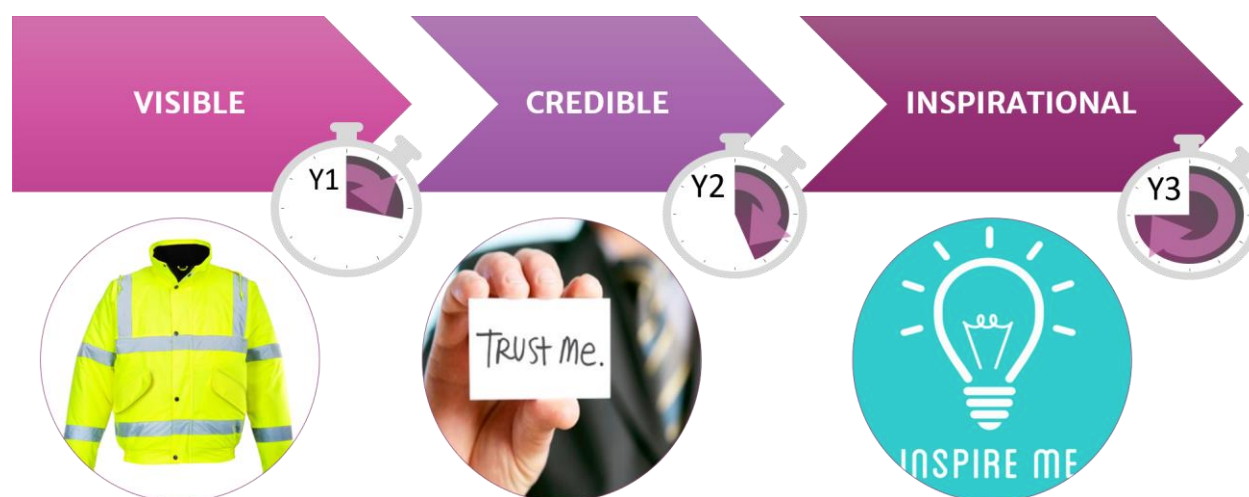


Figure 2 – IRIS C&D approach to be Visible, Credible and Inspirational

All IRIS partners work together to achieve a maximum transfer of information and shareable research results. Each organisation and individual connected to IRIS is able to discuss and reference the project in an **engaging** way. Regular content, clear branding, active social media and ‘elevator pitch’ discussion points are made available to all. Specific and clear calls to action will aim to secure the **commitment** and contribution of the most gifted and enthusiastic as for every concrete action IRIS wants to achieve – we need to have in some way engaged with 100 more (Figure 3).

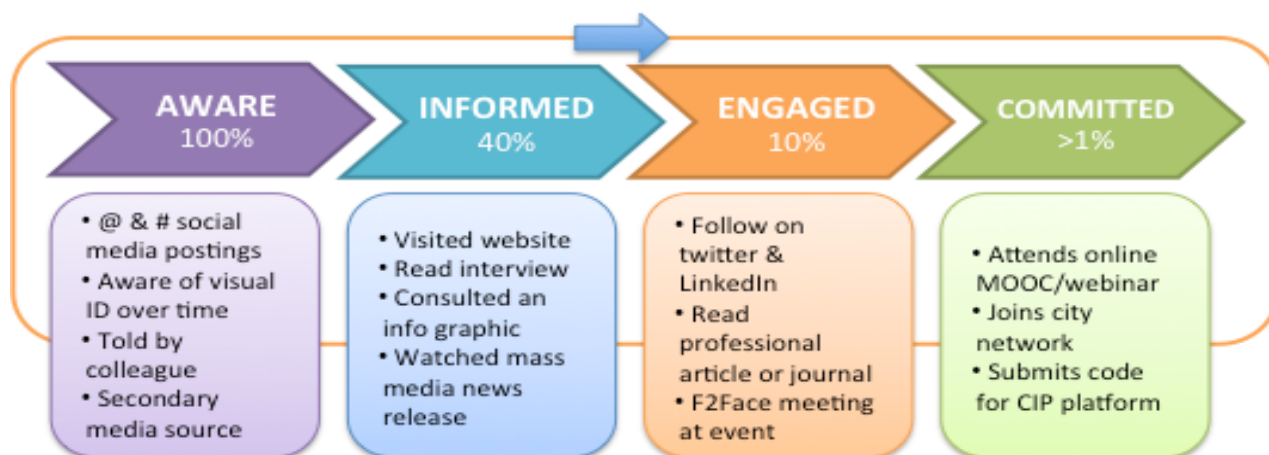


Figure 3 – The Dissemination Funnel' with assigned objectives and call to action (IRIS Project, 2018)

## 2.2. Social media monitoring

Social media monitoring is the process of using social media channels to track, gather and mine the information and data of certain individuals or groups, usually companies or organisations, to assess their reputation and discern how they are perceived online (Social Media Monitoring, 2013). Social media monitoring is also known as social media listening and social media measurement.

In order to evaluate the IRIS online activity, we continuously monitor all conversations, articles and posts that the project publishes on the website and its social media accounts. This allows us to measure the success of our online activities and the impact of the IRIS Smart Cities brand, as well as to listen what others are saying about the IRIS project. In the IRIS case, social media monitoring and analysis is used to:

- Understand topics and tactics that drive social engagement
- Identify and engage target audiences
- Measure the most effective channels and distribution tactics
- Maintain IRIS reputation
- Understand public sentiment about IRIS objectives
- Monitor and participate in relevant conversations
- Engage influencers in relative industries and sectors
- Listen and react to users' questions and comments

Several core performance metrics are used to measure the outcome of IRIS online activity on different platforms. Many of these metrics are cross-platform (used in many platforms) while other as platform-specific.

For the IRIS website, the following metrics are important:

- **Visitors:** Number of users who have initiated at least one session during the date range.
- **Sections (Visits):** Total number of Sessions within the date range. A session is the period time a user is actively engaged with the website.
- **Page views:** The total number of pages viewed. Repeated views of a single page are counted.



- **Pages / Session:** The average number of pages viewed during a session. Repeated views of a single page are counted.
- **Sessions / User:** The average number of sessions per user.
- **Average Session Duration:** The average length of a Session.

For the social media accounts, the following metrics are important:

- **Profile visits / Page Views:** Number of times users visit the account's main page.
- **Impressions:** Number of times users saw an update (tweet, post, video, etc.) in their timeline.
- **Views / Reads:** Number of times users view a video, visit the update's page, read a publication, etc.
- **Mentions:** Number of times users mentions the name of the social media account in their updates.
- **Engagements / Reactions / interactions:** Number of times a user has interacted with an update. This includes all clicks anywhere on the post (including hashtags, links, avatar, username, etc), shares, comments, follows, and likes.
- **Followers / Subscribers:** Number of users that receive regular updates for newly published content.
- **Visitors:** Number of unique users that visit the account page or any other page (i.e. post page, image page, etc.).

## 2.3. Monitoring tools

IRIS project uses a variety of monitoring tools to gather data regarding the outcome of the project's online activity. In particular, the following tools are used:

### Google Analytics<sup>1</sup>

Google Analytics is a web analytics service offered by Google that tracks and reports website traffic (Google Analytics, 2020). As of 2020, Google Analytics is the most widely used web analytics service on the web (Usage statistics of traffic analysis tools for websites, 2020). Users of the service can see exactly how visitors are interacting with their site. Analytics reveals which pages they spend the most time on or which pages they visit before leaving the site without taking action. Insights like these help webmasters make high-value site improvements. Using Analytics, webmasters can see how many new visitors they have gained through their online channels, and how that number has changed over time.

### Google Search Console<sup>2</sup>

Google Search Console is a web service by Google which allows webmasters to check indexing status and optimise the visibility of their websites in the Google search engine (About Google Search Console, 2020). The available tools and reports help webmasters to measure their site's Search traffic and performance, fix issues and make the site shine in Google search results. Google Search Console offers additional functionality to Google Analytics.

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<sup>1</sup> <https://analytics.google.com/>

<sup>2</sup> <https://search.google.com/search-console>



### **Digimind<sup>3</sup>**

Digimind Social Listening platform helps marketers understand audiences, analyse sentiment, and monitor market trends (Digimind - Social Listening Platform, 2020). The monitoring platform offers integrations with many social media platforms (i.e. Twitter, Facebook, LinkedIn, etc.) and collects data from the connected social media accounts. Platform's users create predefined and custom reports using advanced filters such as location, country, sentiment, and personalised tags. These reports help marketers to have a clear picture of their organisation's online reputation.

### **HootSuite<sup>4</sup>**

HootSuite is a social media management platform, which takes the form of a dashboard and supports social network integrations for Twitter, Facebook, Instagram and many more. It provides various functionalities such as scheduling social posts, easily managing the content of the account, tracking social ROI of the account and retrieving information on relevant we conversations. (Hootsuite Platform, 2020)

### **Vicinitas<sup>5</sup>**

Vicinitas is a tool that analyses posts and followers from a Twitter account to presents in-depth analytics on how users are engaging with the published content.

### **Tweepssmap<sup>6</sup>**

Tweepssmap is a GEO targeted Twitter analytics and management platform that enables users to analyse and engage with their Twitter followers. It helps its users understand what region their followers live in, by country, state or city, what language they speak and what time zones they live in. Tweepssmap also allows users to track the growth of their followers, momentum and reach, as well as help them analyse their competitors and customers. Listen and explore consists of exploring of hashtags, tweet alerts, and measuring impact and reach (Tweepssmap, 2020).

### **Native analytics of social media platforms**

All social media platforms offer analytics tools to help users understand how the content they share on the platform grows their business. The functionality of these tools varies from advances solutions (i.e. Twitter, LinkedIn, and YouTube analytics) to more primitive (i.e. Instagram, SlideShare and ResearchGate analytics).

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<sup>3</sup> <https://www.digimind.com/social-listening>

<sup>4</sup> <https://hootsuite.com/>

<sup>5</sup> <https://www.vicinitas.io/>

<sup>6</sup> <https://tweepssmap.com/>





## 3. Impact of the IRIS online activities

### 3.1. Overview

During the first half of the project, IRIS published online a significant amount of content that includes video, visuals, social media updates, journalistic articles, citizen journalism and news releases, and built a strong online presence. The project's website had 19.020 visitors. By using the unique characteristics and audiences of each platform, IRIS managed to distribute specific content better and connect with influencers. Twitter is the flagship platform in social media, where the @IRISsmartcities account has more than 1.000 followers and 750.000 impressions. Apart for Twitter, IRIS is also popular in the other platforms with 523 followers and 45.789 impressions in LinkedIn; 3.052 video views in YouTube's interviews and webinars; and 52.053 views in SlideShare's presentations and infographics. Table 1 present an overview of the project's online activity and its impact.

Table 1 – Overview of the IRIS project online activity and impact

Medium	Content	Followers / Subscribers / Visitors	Impressions	Visits / Views / Reads
Website	65 news articles, 6 academic publications, 5 infographics and 40 public deliverables	19.020	N/A*	26.433
Twitter	472 tweets	1.005	750.000	7.511
LinkedIn	128 posts	523	45.789	2.124
YouTube	17 videos	58	13.016	3.052
SlideShare	7 presentations and 5 infographics	0	N/A	52.053
ResearchGate	2 scientific papers	9	N/A	44
Instagram	69 posts	215	N/A	N/A

\*Non-Applicable

The following figures (), which are exported from the Digimind Social Listening platform show accumulative metrics from the IRIS social media accounts.

(Note 1: The Digimind reports were created in 25<sup>th</sup> of February 2020 (M29), so there is a slight difference between these reports and the detailed statistics for each tool presented in the subsequent sections).

(Note 2: The Digimind statistics do not include the activity in the SlideShare and ResearchGate platforms).



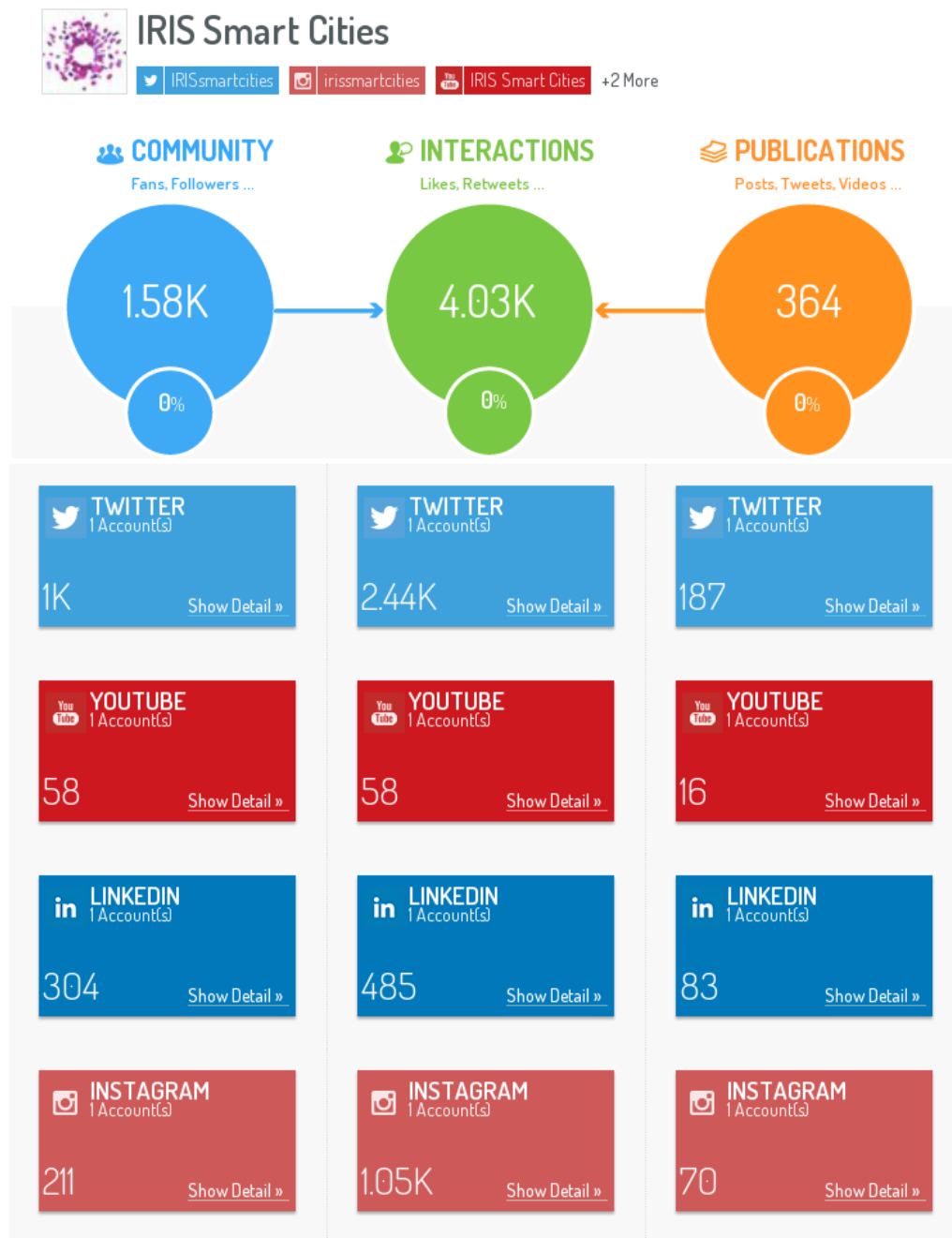


Figure 4 – Overview of the IRIS activity and impact in social media

## PUBLICATIONS

about IRIS Smart Cities between Oct 01, 2017 and Feb 25, 2020



### IRIS Smart Cities

[IRISsmartcities](#) [irissmartcities](#) [IRIS Smart Cities](#) +2 More

	NAME	DATE		INTERACTION	INT.RATE	ENGAGEMENT DETAILS
1	IRIS Smart Cities	NOV 08, 2018 01:44 PM	These are 5 key areas of transition cities in #EU & beyo nd: :... <a href="#">Show More »</a>	 47	47 %	★ likes 26 🔄 retweets 20 ↩ replies 1
2	IRIS Smart Cities	MAY 11, 2018 03:14 PM	Utrecht launches #EUGreenWeek: 21/5/18! :herb:In the cit y, IRIS co... <a href="#">Show More »</a>	 46	46 %	★ likes 32 🔄 retweets 14 ↩ replies 0
3	IRIS Smart Cities	OCT 15, 2018 09:25 AM	This week IRIS will explore the diverse & high-tech @Met ropol... <a href="#">Show More »</a>	 42	42 %	★ likes 25 🔄 retweets 17 ↩ replies 0
4	IRIS Smart Cities	APR 16, 2019 01:42 PM	Citizen engagement: buzzword or meaningful tool? Stud ents from @... <a href="#">Show More »</a>	 42	42 %	★ likes 23 🔄 retweets 17 ↩ replies 2
5	IRIS Smart Cities	OCT 16, 2018 04:29 PM	Amazing work happening in #Gothenburg: No parking sp aces! just mo... <a href="#">Show More »</a>	 36	36 %	★ likes 21 🔄 retweets 14 ↩ replies 1
6	IRIS Smart Cities	JUN 04, 2019 11:03 AM	In @VaasaVasa a new €200m centre of research, product dev & p... <a href="#">Show More »</a>	 36	36 %	★ likes 28 🔄 retweets 8 ↩ replies 0
7	IRIS Smart Cities	APR 02, 2019 08:20 AM	At Sweden's most #sustainable housing concept, a pool o f electric... <a href="#">Show More »</a>	 34	34 %	★ likes 25 🔄 retweets 8 ↩ replies 1
8	IRIS Smart Cities	DEC 10, 2018 12:00 PM	Co-creating smart & #sustainable cities: a year in focus. Pro... <a href="#">Show More »</a>	 32	32 %	★ likes 18 🔄 retweets 14 ↩ replies 0
9	IRIS Smart Cities	JUN 08, 2019 09:41 AM	We loved #Vaasa by bike. From strip between downtown & @univa... <a href="#">Show More »</a>	 32	32 %	★ likes 24 🔄 retweets 7 ↩ replies 1
10	IRIS Smart Cities	FEB 04, 2019 02:43 PM	WORLD FIRST :first_place_medal:: An 'e-revolution' irissm artcities... <a href="#">Show More »</a>	 31	31 %	★ likes 20 🔄 retweets 10 ↩ replies 1

Figure 5 – Top 10 of the IRIS posts based on user interactions



## PUBLICATIONS BY MEDIA

about IRIS Smart Cities between Oct 01, 2017 and Feb 25, 2020

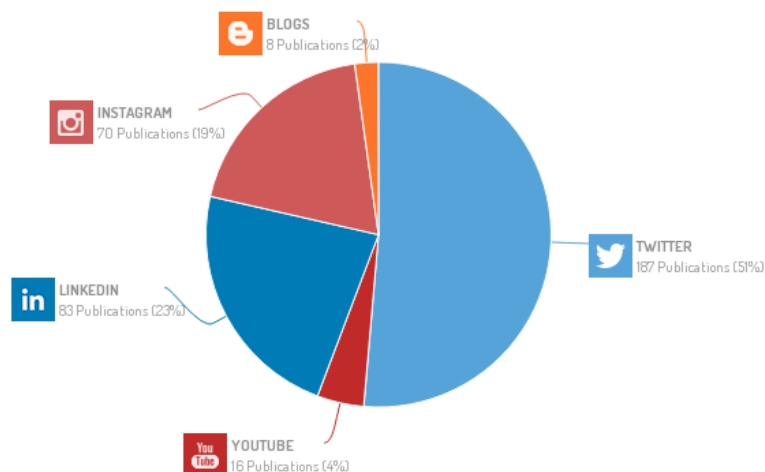


Figure 6 – Distribution of the IRIS posts per social media platform

## INTERACTIONS BY MEDIA

about IRIS Smart Cities between Oct 01, 2017 and Feb 25, 2020

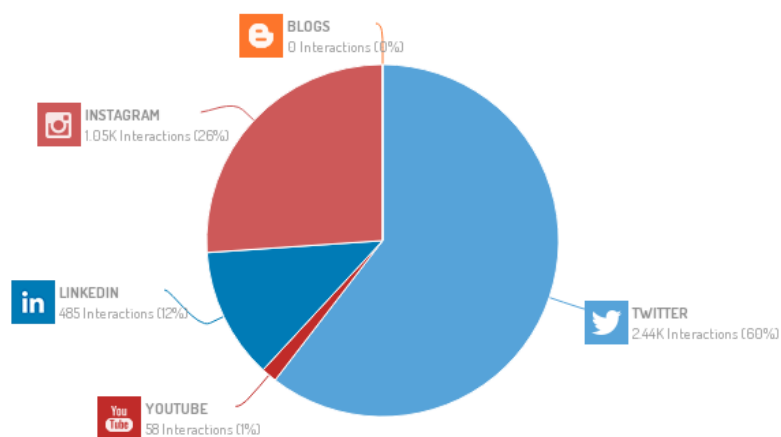


Figure 7 – Distribution of the interactions in the IRIS posts per social media platform



## SUBSCRIBER BY MEDIA

about IRIS Smart Cities between Oct 01, 2017 and Feb 25, 2020

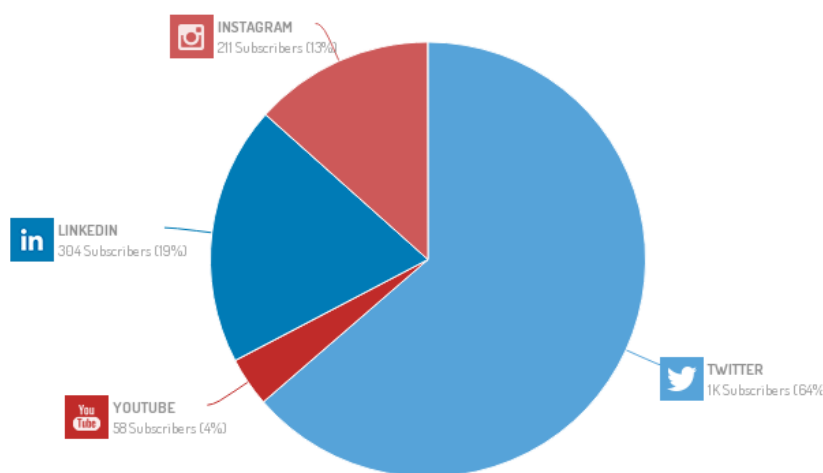


Figure 8 -- Distribution of the subscribers to the IRIS accounts per social media platform

## TOTAL SUBSCRIBERS

about IRIS Smart Cities between Oct 01, 2017 and Feb 25, 2020

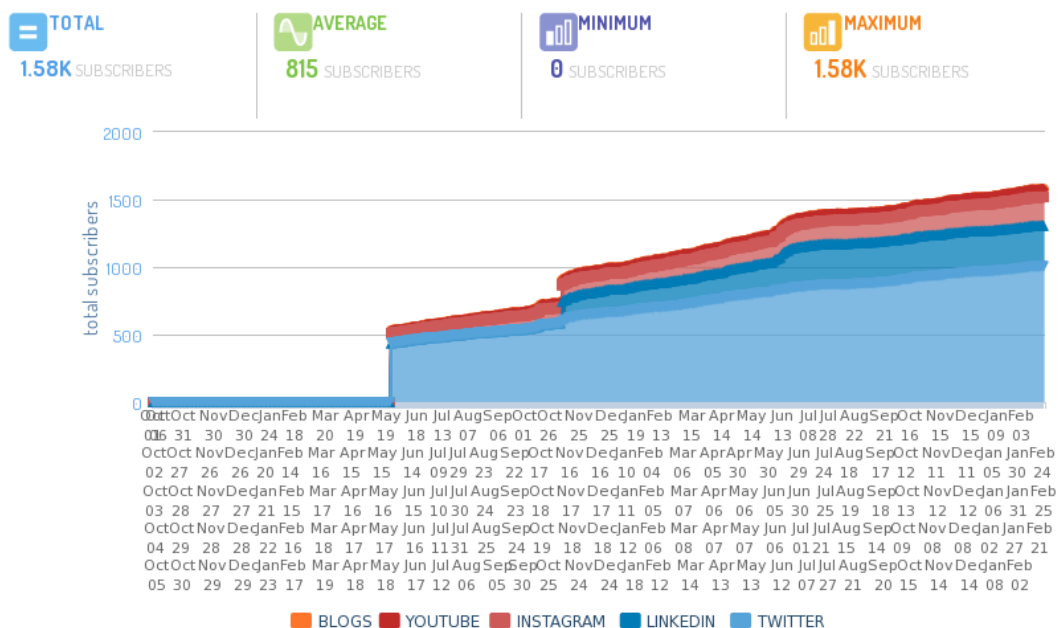
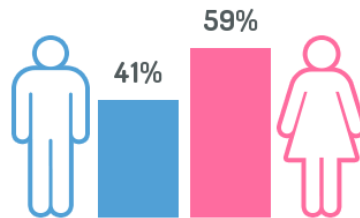


Figure 9 – Evolution of the subscribers to all IRIS accounts

## DEMOGRAPHICS

about IRIS Smart Cities between Oct 1, 2017 12:00 AM and Feb 25, 2020 12:00 AM

### GENDER



*Figure 10 – Gender demographics of the subscribers to all IRIS accounts*



## 3.2. IRIS Website

A **modern and dynamic website** that moves away from being a repository and towards being a ‘digital anchor’ for IRIS content is the pillar of the dissemination and communication strategy. Priority is given to an easy to update and well-connected website with IRIS content featured in the media or sectorial sites, twitter feeds, interviews and blog posts front and centre.

The IRIS website is publicly available at <https://irissmartcities.eu> hosted by CERTH web server facilities in Greece and maintained by CERTH/ITI. An important characteristic of this layout is that it is responsive to smart devices such as smartphones and tablets, allowing easy use and facilitating the presentation of information, as illustrated in the following images:

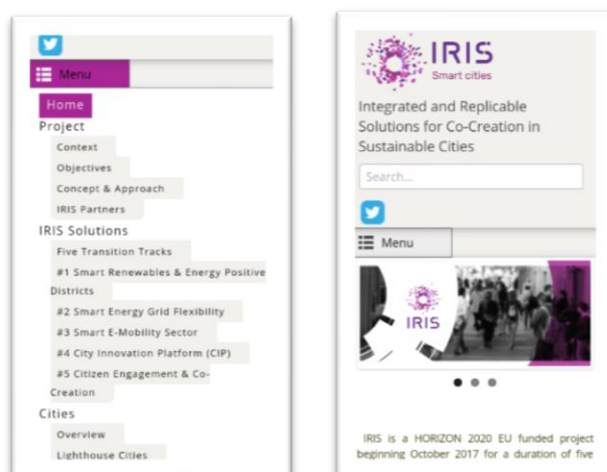


Figure 11 Website layout on smartphone

Apart from the pages that present the IRIS project, the website contains dynamic content such as news articles, the project’s academic publications, and the public deliverables. **By March 2020, 65 news articles, 6 academic publications and 40 public deliverables have been published.**

The Google Analytics service is used to track and report website traffic. The following tables and figures present the main metrics.

Table 2 – The main IRIS website statistics

Visitors	Sections (Visits)	Page views	Pages / Session	Sessions / User	Avg. Session Duration	Avg. Time on Page
19.020	26.433	49.597	1,88	1,39	1m 57s	2m 13s

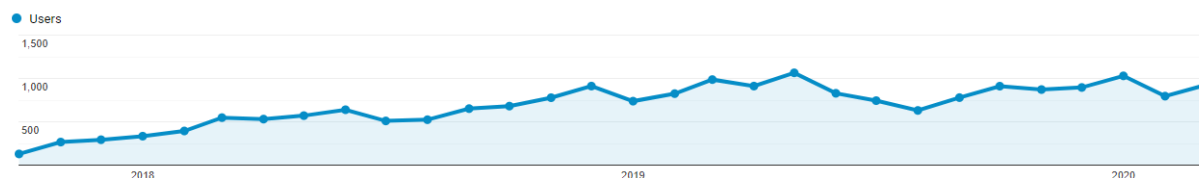


Figure 12 IRIS website visitors per month

The website gathers visitors from all over the world.

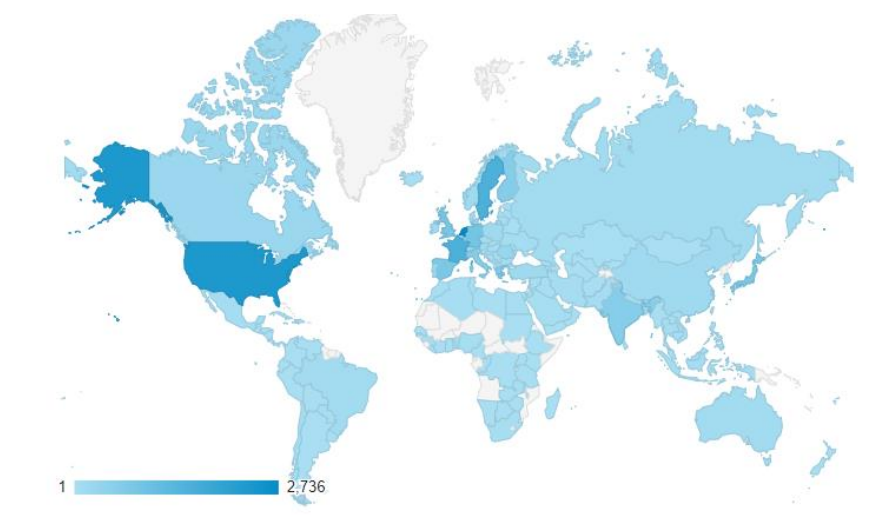


Figure 13 – Website visitors' map

Although, most of the visitors come from countries where an IRIS partner exists (Netherlands, France, Sweden, etc.), Germany, United States, United Kingdom and India supplement the list of the top ten countries.

Country	Users	% Users	City	Users	% Users
1.  Netherlands	2,736	14.25%	1. (not set)	1,554	7.80%
2.  United States	2,326	12.12%	2. Utrecht	1,187	5.96%
3.  Sweden	1,547	8.06%	3. Ashburn	722	3.62%
4.  France	1,529	7.96%	4. Gothenburg	687	3.45%
5.  Germany	879	4.58%	5. Chicago	657	3.30%
6.  United Kingdom	802	4.18%	6. Paris	618	3.10%
7.  Japan	783	4.08%	7. Amsterdam	454	2.28%
8.  Spain	761	3.96%	8. Stockholm	423	2.12%
9.  Greece	664	3.46%	9. London	313	1.57%
10.  Finland	616	3.21%	10. Brussels	268	1.34%

Figure 14 - Top 10 countries and cities of website visitors



The Utrecht demonstration, project overview and public deliverables page are the three most popular pages of the IRIS website (Figure 15).

Page	Page Views	% Page Views
1. /	12,045	24.29%
2. /content/utrecht-netherlands	2,709	5.46%
3. /irissmartcities/	2,119	4.27%
4. /public-deliverables	1,580	3.19%
5. /content/objectives-ambition	1,517	3.06%
6. /partners	1,475	2.97%
7. /content/context	1,436	2.90%
8. /content/gothenburg-sweden-0	1,342	2.71%
9. /news	999	2.01%
10. /contact	996	2.01%

Figure 15 – The 10 most viewed IRIS website pages

Most of the visitors (59,5%) discover the IRIS website through organic search (i.e. by clicking on the results of a relevant search query).

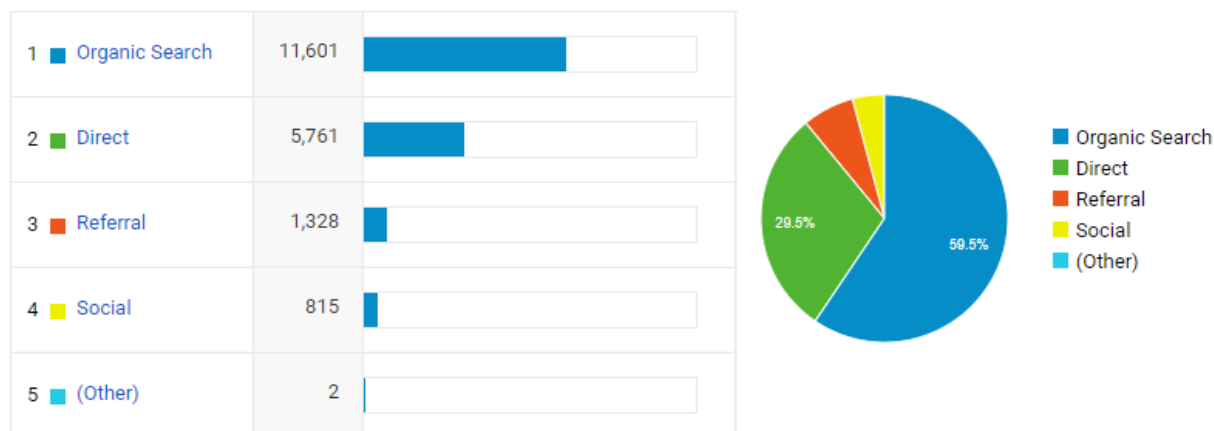


Figure 16 - Top channels for visitors' acquisition

The analysis of search queries, using Google Search Console, reveals similar results regarding the origin of the website's visitors. Most of them come from countries where an IRIS partner exists. Moreover, the most used search queries are about the project, the partners, the Lighthouse cities and the Fellow Cities. The IRIS project website is the point of reference for the smart city initiatives for the LH cities, as the average position of the IRIS website for search terms such as "Utrecht smart city", "smart city Utrecht", "Gothenburg smart city" is 2,5 and 3,9 and respectively. An interesting fact is that when someone





searches for “objectives of smart city” or “smart city objectives”, the IRIS project’s “Objectives & Ambition” page<sup>7</sup> appears in the 4<sup>th</sup> or 5<sup>th</sup> position of the search results. Figure 17 shows the top 24 search queries that lead to the IRIS website, the impressions of the IRIS webpages in each query, the average position of the relevant IRIS webpage in the search results and the number of clicks that users click through to the website.

Query	↓ Clicks	Impressions	Position
iris smart cities	268	517	1
iris project	213	3,513	4.8
utrecht smart city	88	308	2.5
smart city utrecht	63	376	3.9
cstb	50	14,156	6.7
sp technical research institute of sweden	50	1,346	5.3
focsani	43	22,153	8.4
iris eu	38	371	1.9
utrecht municipality	35	2,449	4.5
municipality of utrecht	32	421	3
edf france	31	21,000	7.6
lombosnet	28	1,582	8.1

Query	↓ Clicks	Impressions	Position
municipality utrecht	25	1,081	3.4
objectives of smart city	25	665	3.7
iris utrecht	25	319	4.2
smart city objectives	21	349	5.2
gothenburg smart city	19	91	3
cstb france	18	1,693	4.3
focsani romania	16	4,658	5.4
cities in gothenburg	16	120	3.2
iris	15	62,463	20.2
objective of smart city	13	845	4.8
sp sweden	13	586	4.1
smart city netherlands	13	272	7.6

Figure 17 Top 24 search queries lead to the IRIS website

IRIS activity on social media contributes to the acquisition of a small number of visitors in the IRIS website. These visitors are acquired mainly through Facebook, Twitter and LinkedIn (Figure 18).

<sup>7</sup> <https://irissmartcities.eu/content/objectives-ambition>




Social Network ?	Acquisition		
	Users ? ↓	New Users ?	Sessions ?
	<b>815</b> % of Total: 4.28% (19,020)	<b>764</b> % of Total: 4.01% (19,061)	<b>1,095</b> % of Total: 4.14% (26,433)
1. Facebook	<b>274</b> (33.58%)	263 (34.42%)	313 (28.58%)
2. Twitter	<b>271</b> (33.21%)	247 (32.33%)	440 (40.18%)
3. LinkedIn	<b>256</b> (31.37%)	241 (31.54%)	326 (29.77%)
4. Scoop.it	<b>7</b> (0.86%)	6 (0.79%)	7 (0.64%)

Figure 18 Acquisition of IRIS website visitors through social media

### 3.2.1. IRIS Utrecht website

Utrecht LH city created a micro-site to promote the project in the local language (Figure 19). The website, which is available at <https://iris-utrecht.nl/>, presents the project and the demonstrations in the city. Moreover, it informs the citizens about the progress and the related activities.






## IRIS: oplossingen voor mooier, prettiger en betaalbaar wonen in de stad Utrecht

[Home](#) [Project IRIS](#) [Kennisbank](#) [Nieuws & media](#) [Agenda](#) [Contact](#) [Voor bewoners](#)


### Over IRIS Utrecht



Welkom op de Nederlandse website van IRIS. In dit project werken zeven Europese steden samen aan de duurzame stadswijk van de toekomst. Op deze website vindt u informatie over IRIS in Utrecht, een kennisbank, nieuwsberichten en een agenda van IRIS-activiteiten. Onder 'voor bewoners' staat informatie gericht op bewoners van de wijk Kanaleneiland.

[> Lees meer over IRIS in Europa \(in het Engels\)](#)

### Kanaleneiland-Zuid



Utrechtse partners investeren in de wijk Kanaleneiland-Zuid. Denk aan opgeknapt woningen, elektrische bussen en laadpalen die zonne-stroom teruggeven aan de wijk. Straks kunt u een wasje draaien op eigen zonne-stroom, na zonsondergang. Kanaleneiland-Zuid wordt een Europese koploper in duurzame energie en elektrisch vervoer.


[> Lees meer over de aanpak in Utrecht](#)

### Nieuws

- Leerlingen in Kanaleneiland gaan op Energie Speurtocht
- Huurders Kanaleneiland-Zuid krijgen slimme thermostaat Toon
- 500ste openbare laadpaal voor stad Utrecht is AC-bidirectioneel

[> Meer nieuws](#)

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This project has received funding from the European Union's Horizon 2020 Framework Programme for Research and Innovation under grant agreement no 774199.

Figure 19 – IRIS Utrecht website

### 3.3. Twitter account

From month one of the project, IRIS has been very active on social media and values the huge potential reach it gives to both professional and public audiences. Twitter is preeminent among social media for smart city content and thought leaders. Twitter also provides a useful listening post and strategic watch on key issues and developments.

IRIS aims to become a key influencer on the channel during the project – and potentially beyond. **By month 30, @IRISsmartcities has published 472 tweets and has exceeded expectations and counts over 1005 followers and several highly favoured influencers among followers and regular interactions.**

Using high-quality visual content, IRIS promotes the project's activities and achievement (Figure 20). Moreover, it promotes the achievements of other Smart Cities and Communities (SCC) projects.

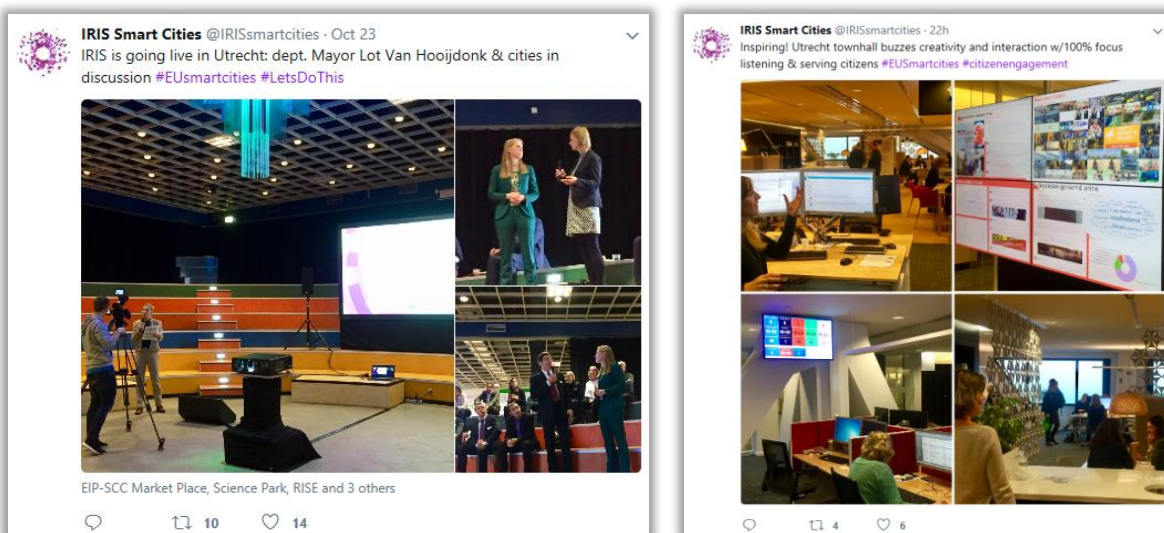


Figure 20: IRIS tweet posts

The content of the tweets is relevant to the project's concepts, and the LH and Fellow cities (Figure 21).



Figure 21 - Word-cloud created using the text of the IRIS tweets

The proper use of hashtags (Figure 22) and user mentions (Figure 23) connects IRIS with relevant content and users.

### Hashtags

#smartcities	70	
#smartcityvisions	63	
#eusmartcities	61	
#irisgbg	24	
#mobility	21	
#utrecht	18	
#energytransition	18	
#gothenburg	16	
#smartcity	15	
#h2020ssc	13	

Figure 22- Most used hashtags by @IRISsmartcities

### User Mentions

@irissmartcities	81	
@johannebergsp	30	
@metropolenca	24	
@smartcityssc	18	
@usi_nl	15	
@imredd_uca	14	
@eusmartcities	14	
@vaasavasa	12	
@wedrivesolar	10	
@vulogtech	9	

Figure 23 – Top user mentions by @IRISsmartcities

IRIS followers list includes several highly favoured influencers (experts, organisations and companies) (Figure 24).













 <p><b>@dianefrancis1</b> Diane Francis 140K Following 263K Followers</p> <p>Canada, US, Europe Lifelong anti-corruption, anti-stupidity, tech activist. Author, National Post, American Interest, Atlantic Council, Ryerson U, Singularity U</p>	 <p><b>@EU_ENV</b> EU Environment 30K Following 90K Followers</p> <p>Brussels The official account for @EU_Commission Directorate-General for Environment (DG ENV). Rts and likes are not necessarily endorsements.</p>	 <p><b>@PPFEnergia</b> Pêricles 47K Following 75K Followers</p> <p>Rio de Janeiro Assessoria em Desenvolvimento de Negócios de Energia - Análise do Setor Elétrico - Energia Renovável - Eficiência Energética</p>	 <p><b>@EUClimateAction</b> EU Climate Action 18K Following 70K Followers</p> <p>Brussels, Belgium The Directorate-General for #ClimateAction (DG CLIMA) is responsible for the @EU_Commission's international &amp; domestic activities fighting #climatechange</p>
 <p><b>@openscience</b> Open Science 16K Following 65K Followers</p> <p>LHR   SFO   SEA to open science... #openscience</p>	 <p><b>@SmartCityexpo</b> Smart City Expo 4,587 Following 55K Followers</p> <p>Barcelona, Spain The world's leading event for cities. 17-19 Nov 2020, Barcelona. #smartcity #innovation @Fira_Barcelona #SCEWC2020</p>	 <p><b>@Shirastweet</b> Shira Rubinoff 30K Following 54K Followers</p> <p>New York, NY #Cybersecurity &amp; #Blockchain #Advisor, Thought-Leader &amp; #Speaker Top ranked #Influencer globally in #cybersecurity President @SecureMySocial &amp; @PrimeTechPtr</p>	 <p><b>@modacitylife</b> Modacity 45K Following 47K Followers</p> <p>Delft, Nederland Melissa and Chris Bruntjett are the co-founders of Modacity and co-authors of "Building the Cycling City: The Dutch Blueprint for Urban Vitality".</p>
 <p><b>@THEnergyNet</b> Dr Thomas Hillig 48K Following 45K Followers</p> <p>Muenchen / Munich - Germany Founder THEnergy—#Renewables—#EnergyTransition—#Innovation #Microgrid #EnergyAccess #Wind #EnergyStorage #Hydrogen #Energy #SmartCities #Climate #ClimateChange</p>	 <p><b>@Catapult_UK</b> Catapult 36K Following 42K Followers</p> <p>Swindon, England Catapults are a rapidly growing network of #technology centres, established by @innovateuk with over £1bn of UK government #funding &amp; #innovation #investment.</p>	 <p><b>@Energy4Europe</b> Energy4Europe 509 Following 36K Followers</p> <p>Europe We are the @EU_Commission's Directorate-General for Energy. We tweet &amp; RT on EU policy developments, news, facts &amp; more. #EUGreenDeal #CleanEnergyEU</p>	 <p><b>@CORDIS_EU</b> EU Research Results 5.7K Following 34K Followers</p> <p>Luxembourg Official CORDIS account. News and information on EU-funded research projects &amp; results #EUresearch #FP7 #Horizon2020 #ResultsPacks #researchEU #H2020</p>

Figure 24 IRIS Twitter account – Top followers

Table 3 shows the overall activity in Twitter, while Table 4 presents detailed statistics per month.

Table 3 – Overview of IRIS Twitter account

Tweets	Impressions	Profile Visits	Mentions	Followers	Total Engagement	Engagement/Tweet
472	750K	7.511	702	1005	4,1K	8,6



Table 4 – Detailed statistics of the IRIS Twitter account

Month	Tweets	Impressions	Profile visits	Mentions	New followers
Sep-17	19	10.400	629	21	77
Oct 17	36	36.300	1.295	36	117
Nov 17	23	19.400	536	37	62
Dec 17	12	8.000	163	10	14
Jan 18	13	15.000	241	7	41
Feb 18	12	12.600	172	12	33
Mar 18	28	27.600	574	30	45
Apr 18	11	18.200	244	29	26
May 18	24	31.800	326	46	29
Jun 18	20	23.600	226	28	31
Jul 18	10	12.900	75	10	18
Aug 18	13	21.200	137	16	23
Sep 18	14	20.500	142	15	18
Oct 18	24	45.600	320	38	44
Nov 18	27	58.900	337	42	65
Dec 18	6	27.200	67	16	18
Jan 19	13	29.200	71	18	31
Feb 19	15	24.900	56	12	18
Mar 19	11	24.200	211	40	38
Apr 19	12	33.700	153	16	34
May 19	22	36.800	263	33	23
Jun 19	16	35.800	362	31	40
Jul 19	9	21.700	48	6	18
Aug 19	8	18.400	72	14	9
Sep 19	8	20.200	53	21	14
Oct 19	15	22.400	138	6	37
Nov 19	12	21.500	94	22	20
Dec 19	8	16.500	61	21	15
Jan 20	12	21.500	98	22	23
Feb 20	13	18.500	155	28	14
Mar 20	6	15.500	192	19	10
<b>Total</b>	<b>472</b>	<b>750.000</b>	<b>7.511</b>	<b>702</b>	<b>1.005</b>



Like the website, most of the @IRISsmartcities followers come from countries where an IRIS partner exists (Figure 25, Figure 26, Figure 27 and Figure 28).



Figure 25 – Global map of the @IRISsmartcities followers

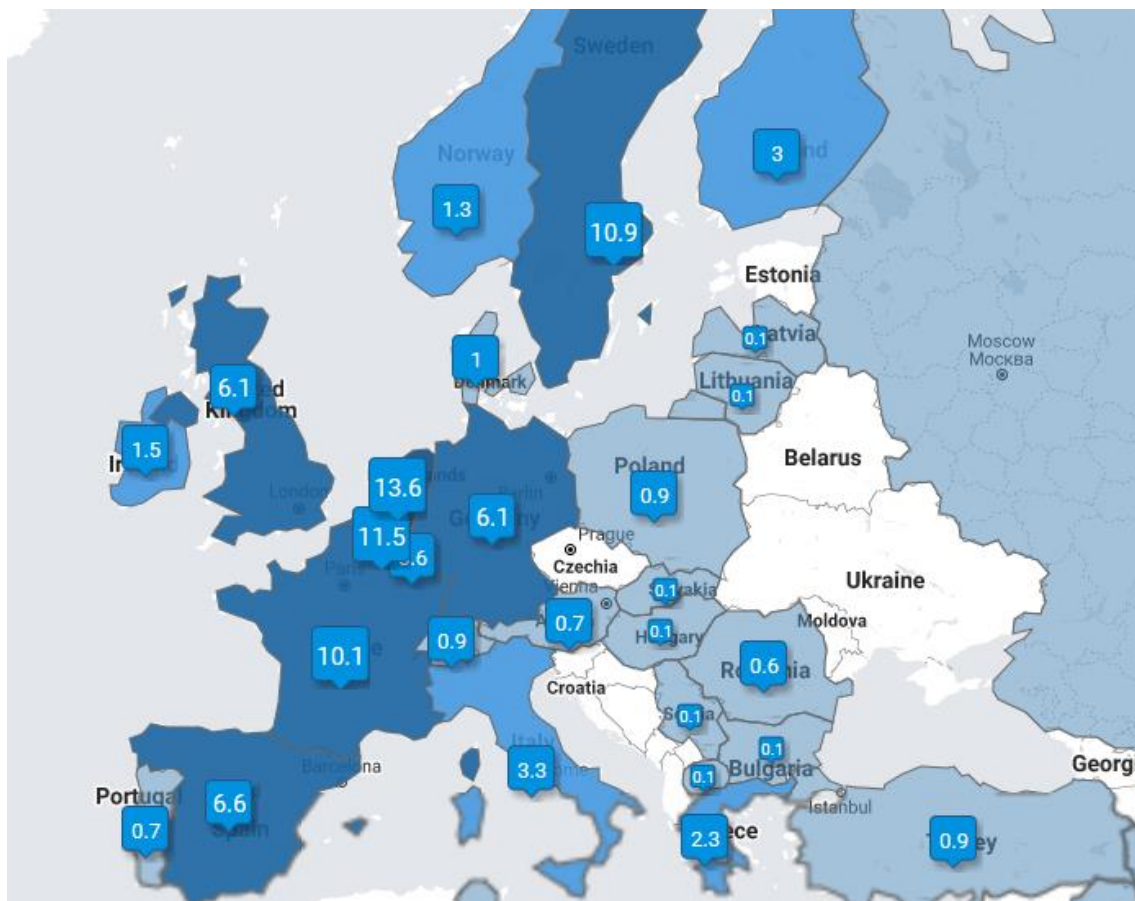


Figure 26 – Europe map of the @IRISsmartcities followers

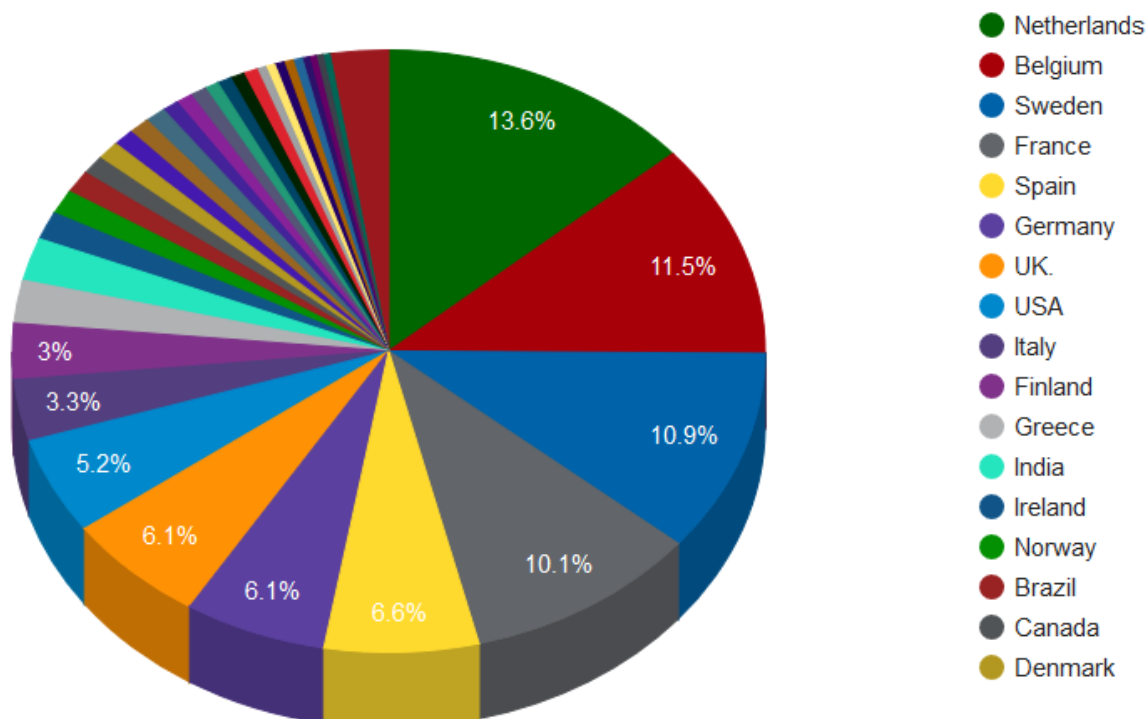
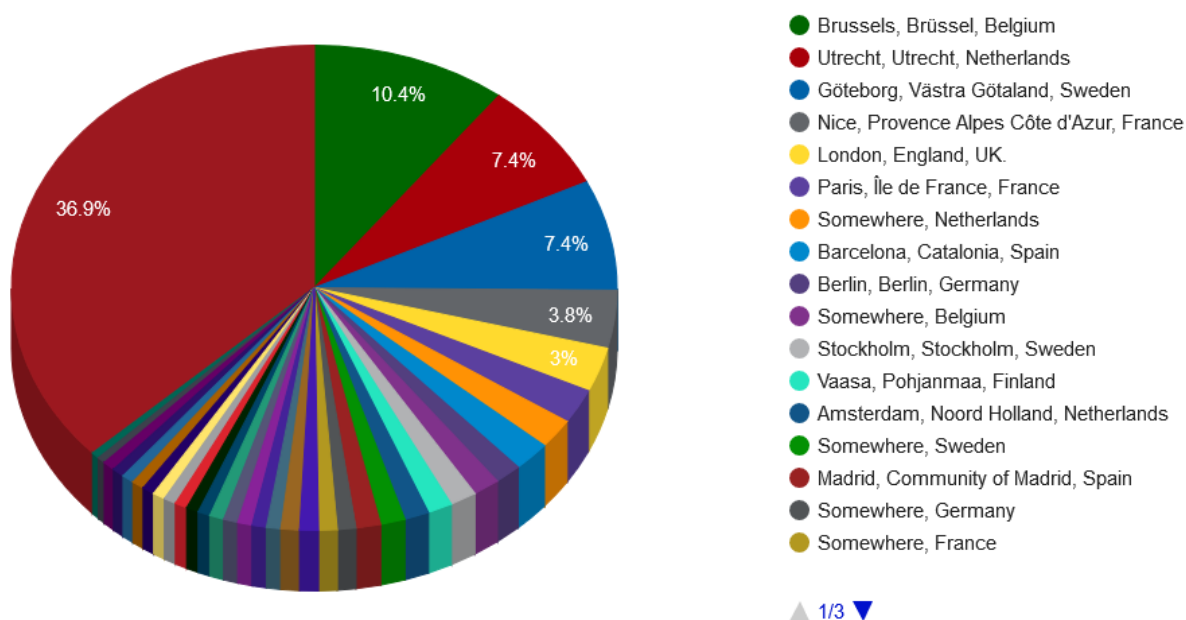


Figure 27 IRIS Twitter account – Followers per country



▲ 1/3 ▼

Figure 28 IRIS Twitter account – Followers per city





The majority of users that mention @IRISsmartcities also came from countries where an IRIS partner exists (Figure 29).

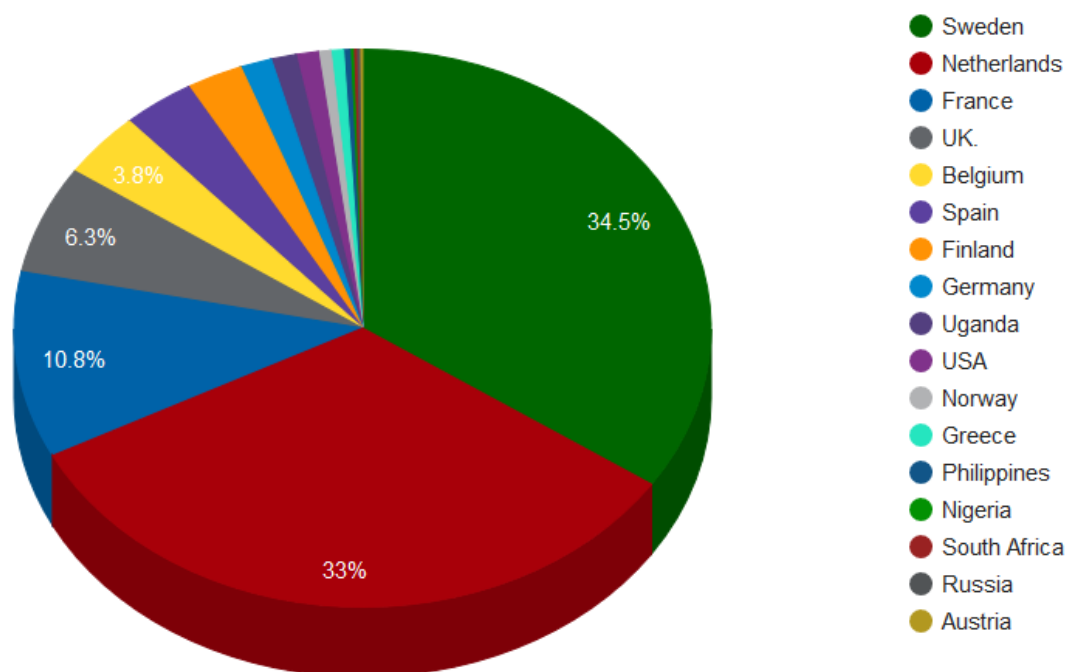


Figure 29 IRIS Twitter account – Mentions per country

Figure 30 and Figure 31 present other demographics of the @IRISsmartcities account.

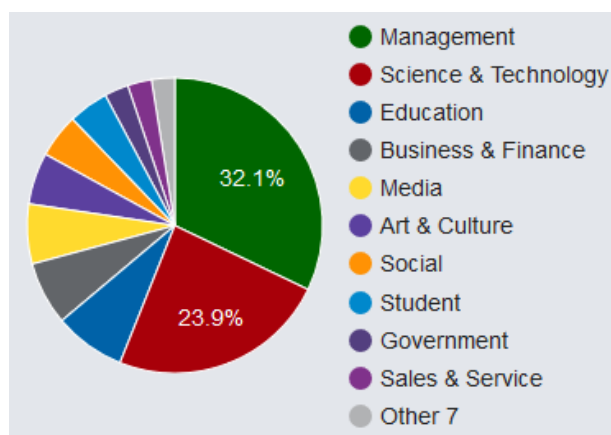


Figure 30 IRIS Twitter account - Followers  
Demographics - Occupation

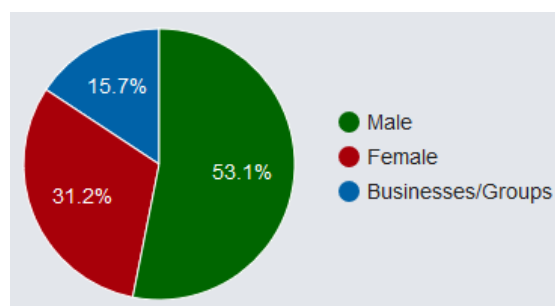


Figure 31 IRIS Twitter account - Followers  
Demographics - Gender



## 3.4. LinkedIn Page

LinkedIn is an online platform for business- and employment-oriented social networking services. An account in such an online platform is of major importance for IRIS since it will facilitate the communication with specific target groups and online communities such as ICT professionals, researchers, technical innovation groups and engineers. Maintaining contact with such groups and individuals will not only assist in communicating the project's results and content in such audience but also in finding contribution and support by specialists in certain domains essential for the project.

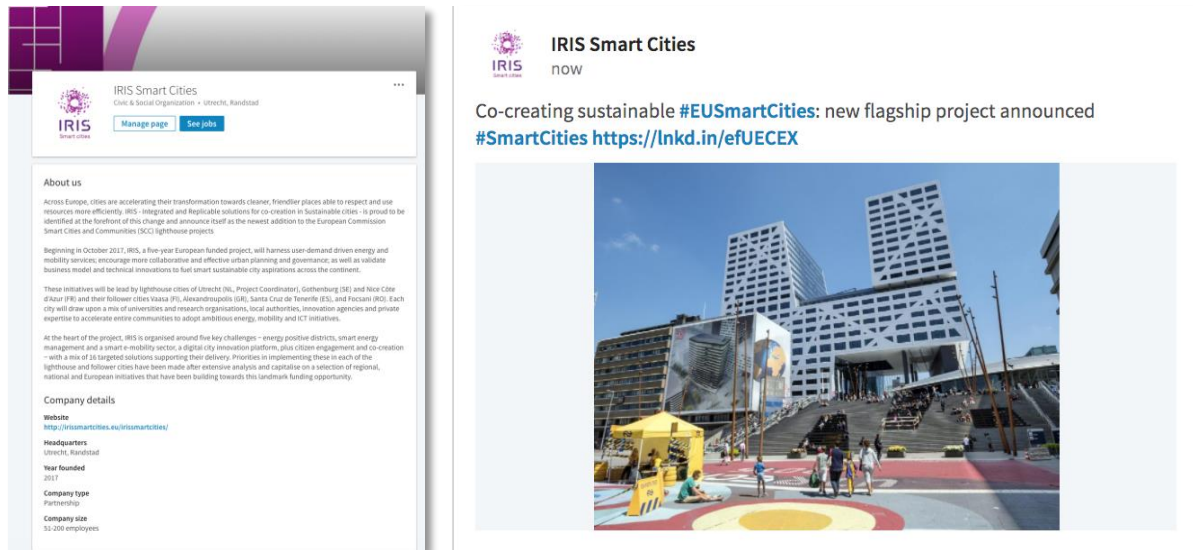


Figure 32 IRIS on LinkedIn

During the first 30 months of the project (1/10/2018 – 31/3/2020), the IRIS organisation in the LinkedIn platform published 128 posts and managed to attract 523 followers. Table 5 presents the main metrics of the IRIS activity in LinkedIn.

Table 5 – Overview of IRIS LinkedIn activity

Month	Impressions	Clicks	Reactions	Shares	Page Views	Followers
Oct 17	15	1	1	0	8	3
Nov 17	2.328	52	13	5	85	26
Dec 17	278	7	0	0	47	10
Jan 18	1.381	14	8	2	49	12
Feb 18	663	6	5	1	34	4
Mar 18	2.399	22	24	3	94	18
Apr 18	1.637	42	7	3	102	9
May 18	1.974	61	44	6	86	20
Jun 18	1.082	25	18	1	52	9



Month	Impressions	Clicks	Reactions	Shares	Page Views	Followers
Jul 18	483	7	5	0	32	1
Aug 18	980	28	9	1	27	5
Sep 18	1.068	44	48	6	82	5
Oct 18	1781	68	70	9	131	20
Nov 18	1810	71	48	7	75	13
Dec 18	750	32	28	3	47	12
Jan 19	600	35	17	0	26	11
Feb 19	740	31	19	5	50	10
Mar 19	760	34	20	6	49	8
Apr 19	497	12	14	1	38	13
May 19	1455	28	78	9	74	14
Jun 19	3847	156	124	21	170	78
Jul 19	2.413	85	49	2	61	17
Aug 19	929	31	21	2	21	6
Sep 19	1.405	45	47	5	67	8
Oct 19	2.005	64	59	9	112	9
Nov 19	2.392	121	86	10	92	31
Dec 19	2.670	88	87	2	116	35
Jan 20	2.420	113	80	10	88	15
Feb 20	2.809	81	86	12	79	25
Mar 20	2.227	75	53	15	130	76
<b>Total</b>	<b>45.798</b>	<b>1.479</b>	<b>1.168</b>	<b>156</b>	<b>2.124</b>	<b>523</b>

An important metric that shows how efficient is the IRIS activity in LinkedIn is the “**Engagement rate**”. Engagement rate is calculated as: (Clicks + Likes + Comments + Shares + Follows) / Impressions. **IRIS engagement rate is constantly above 5,4%, which is the typical rate for a company page<sup>8</sup>.**

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<sup>8</sup> Forrester Insights - Use LinkedIn For Social Reach, available at <https://go.forrester.com/blogs/14-06-27-use-linkedin-for-social-reach/>

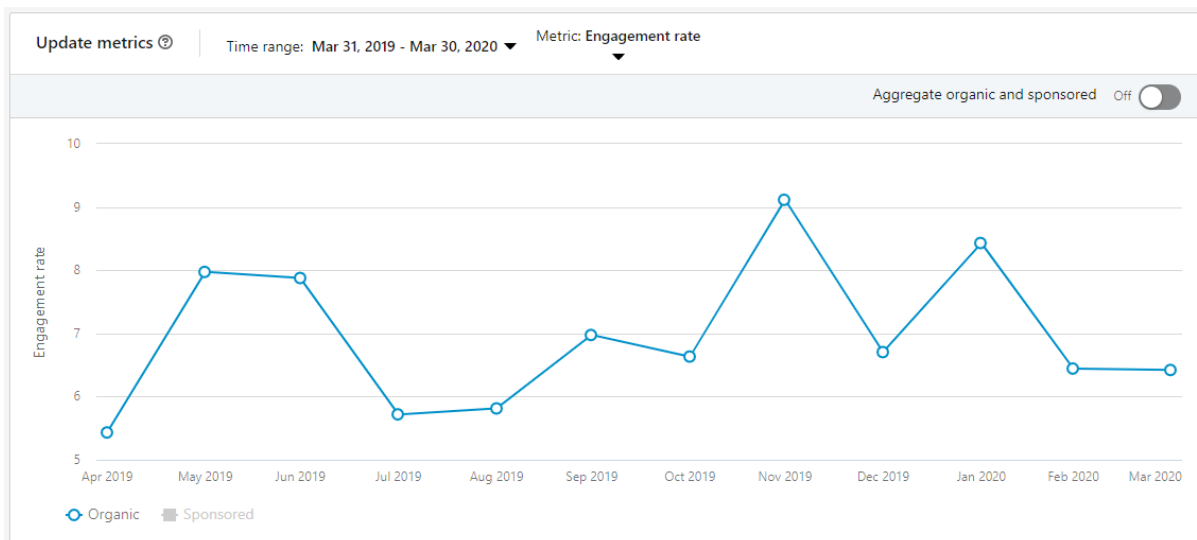


Figure 33 IRIS LinkedIn Page – Engagement rate per month

The following figures show the main usage metrics of the IRIS LinkedIn page.

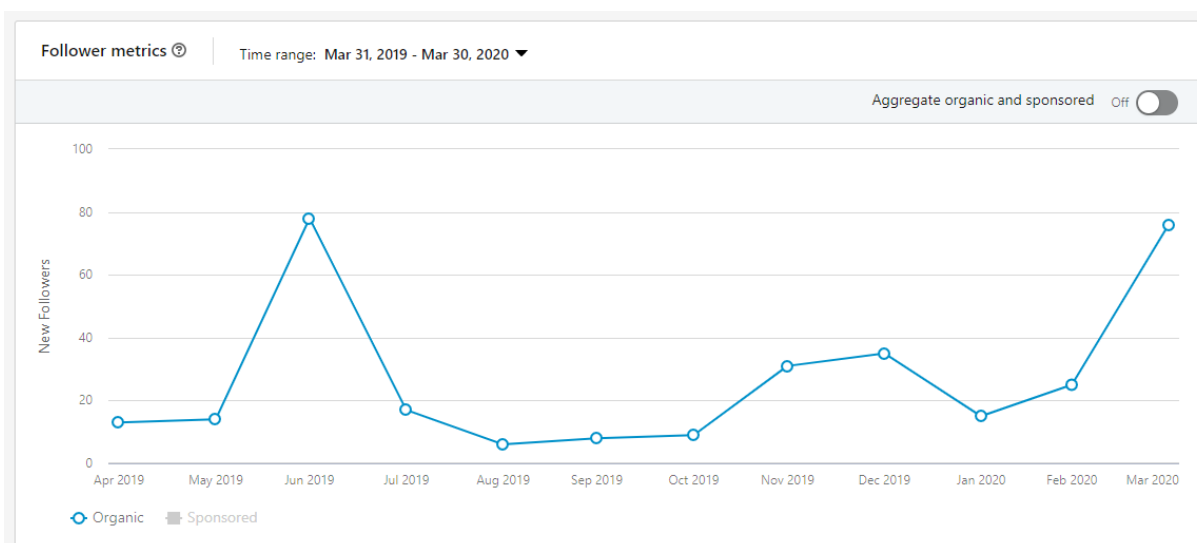


Figure 34 IRIS LinkedIn Page – New followers per month

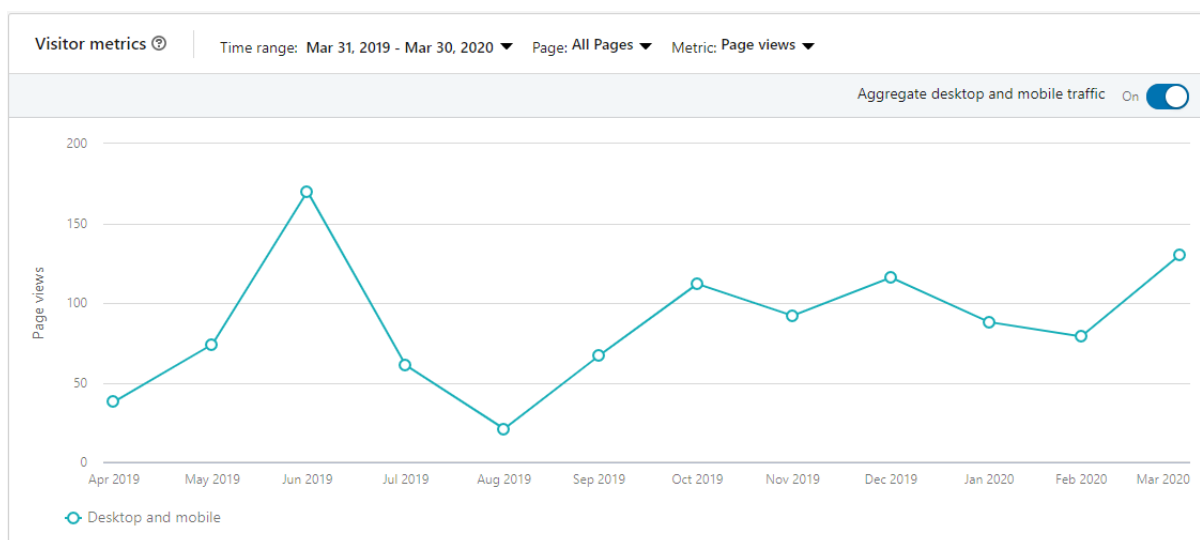


Figure 35 IRIS LinkedIn Page – Page views per month

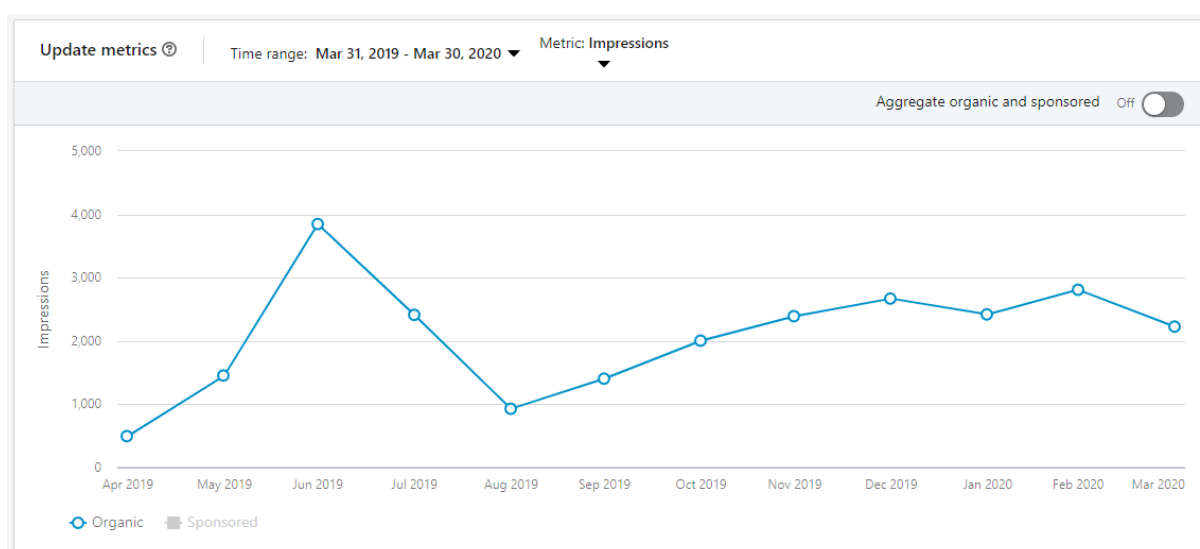


Figure 36 IRIS LinkedIn Page - Total impressions per month

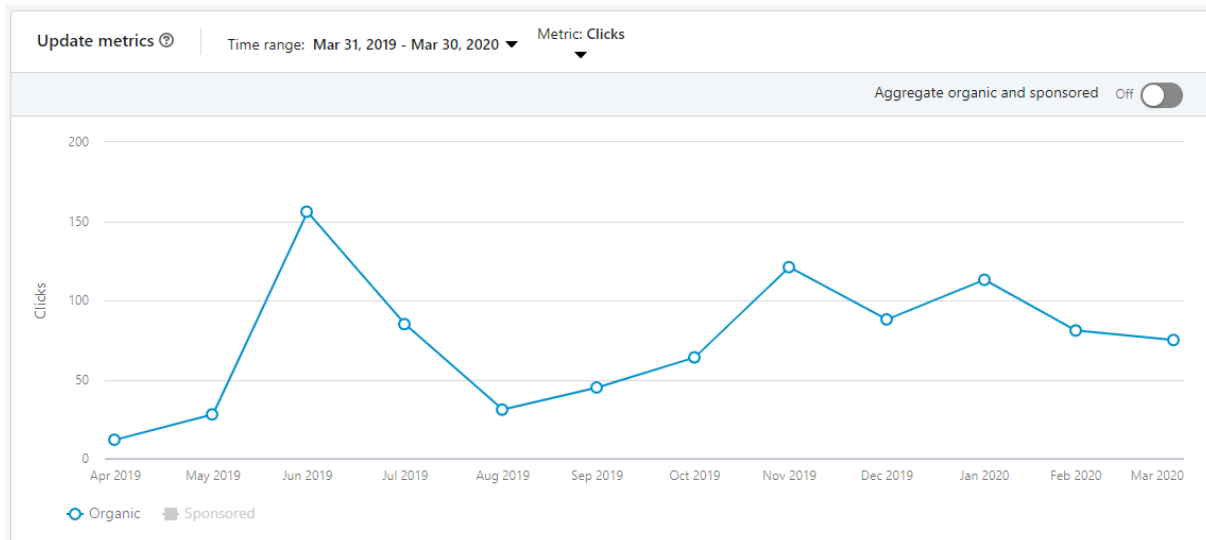


Figure 37 IRIS LinkedIn Page - Total clicks per month

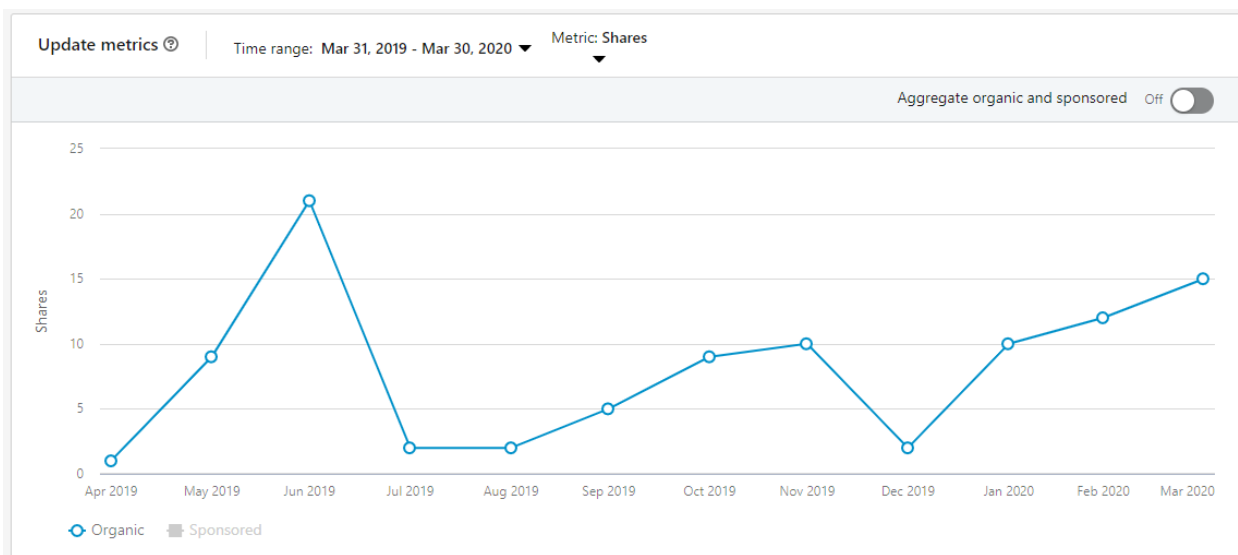


Figure 38 IRIS LinkedIn Page - Total shares per month

As LinkedIn is a social network for professionals, it provides valuable demographics for both visitors and followers. The following figures present the distribution of followers per location, job function, industry, seniority, and company size.

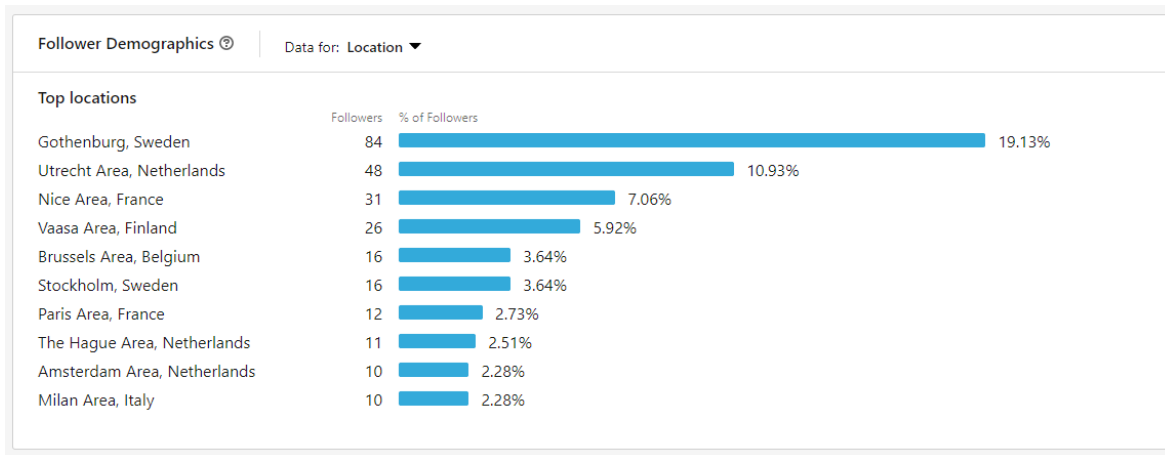


Figure 39 Top locations of IRIS LinkedIn account followers

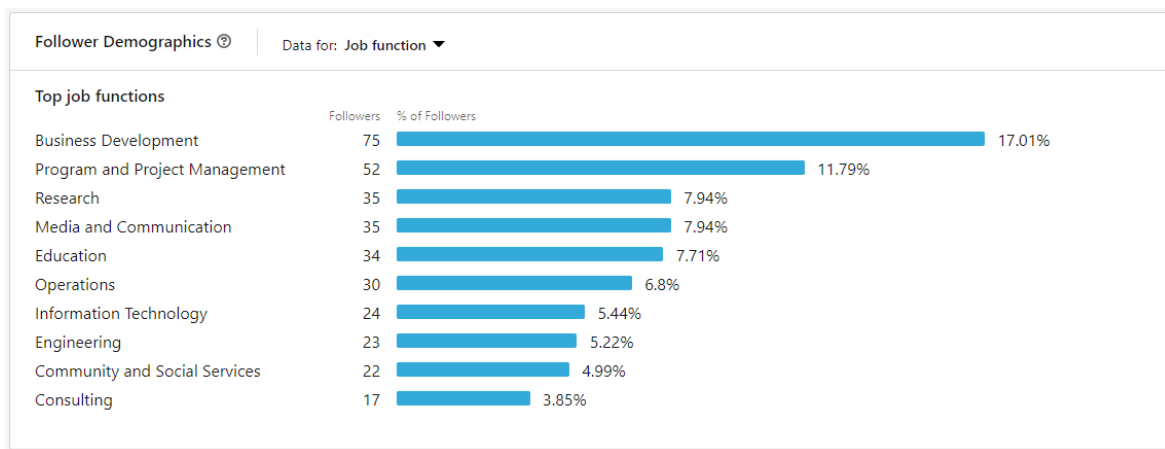


Figure 40 Top job functions of IRIS LinkedIn account followers

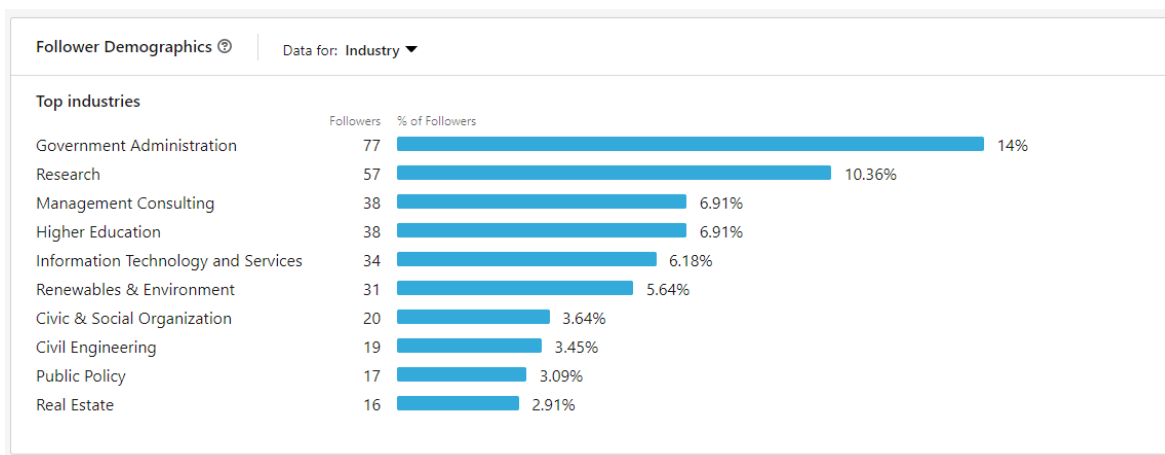


Figure 41 Top industries of IRIS LinkedIn account followers

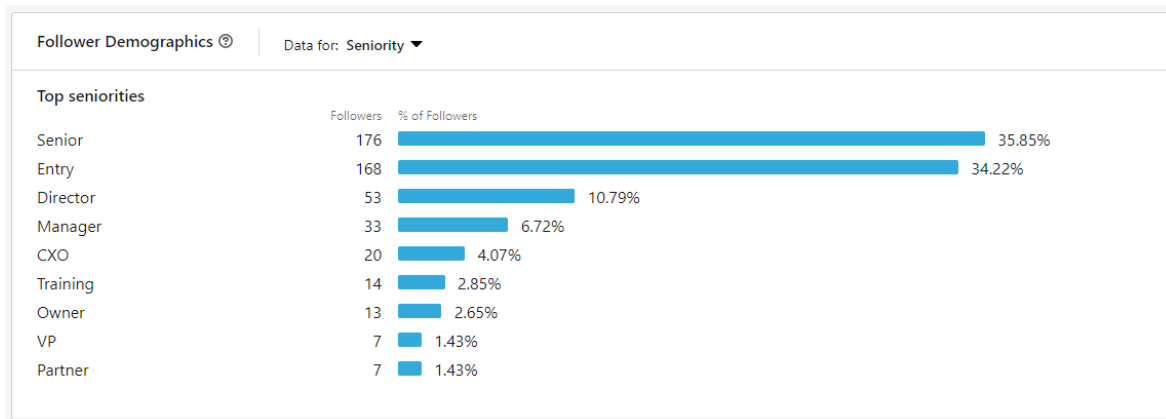


Figure 42 Top seniorities of IRIS LinkedIn account followers

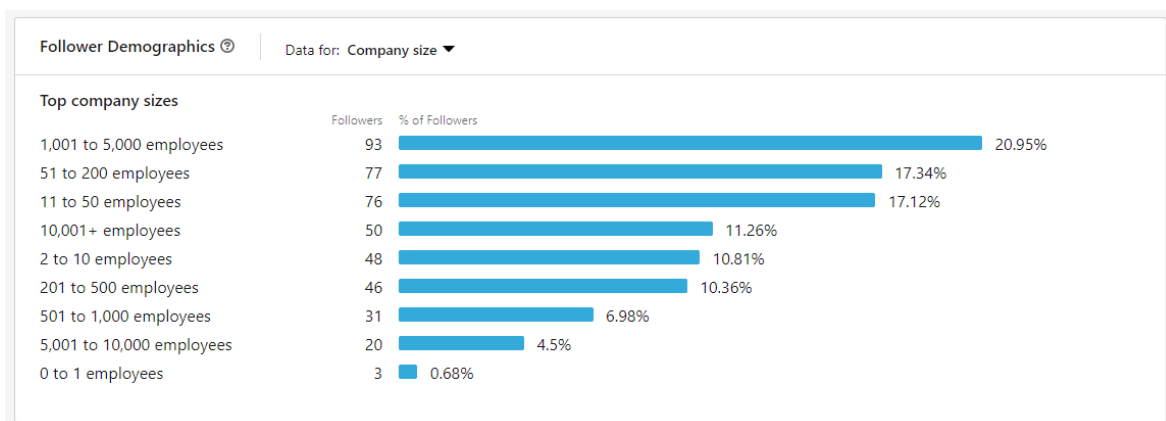


Figure 43 Top company sizes of IRIS LinkedIn account followers



## 3.5. YouTube Channel

YouTube is an online video-sharing platform, widely known and used by a different type of audiences for many different purposes, from entertainment to professional and business-related.

The IRIS project has its own account<sup>9</sup>, used for publishing videos related to events, sharing knowledge and lessons learned, providing material for researchers and communicating the latest news and project results. It is the home of IRIS's video interview series #SmartCityVisions, where key members of the project and broader smart city influencers feature.

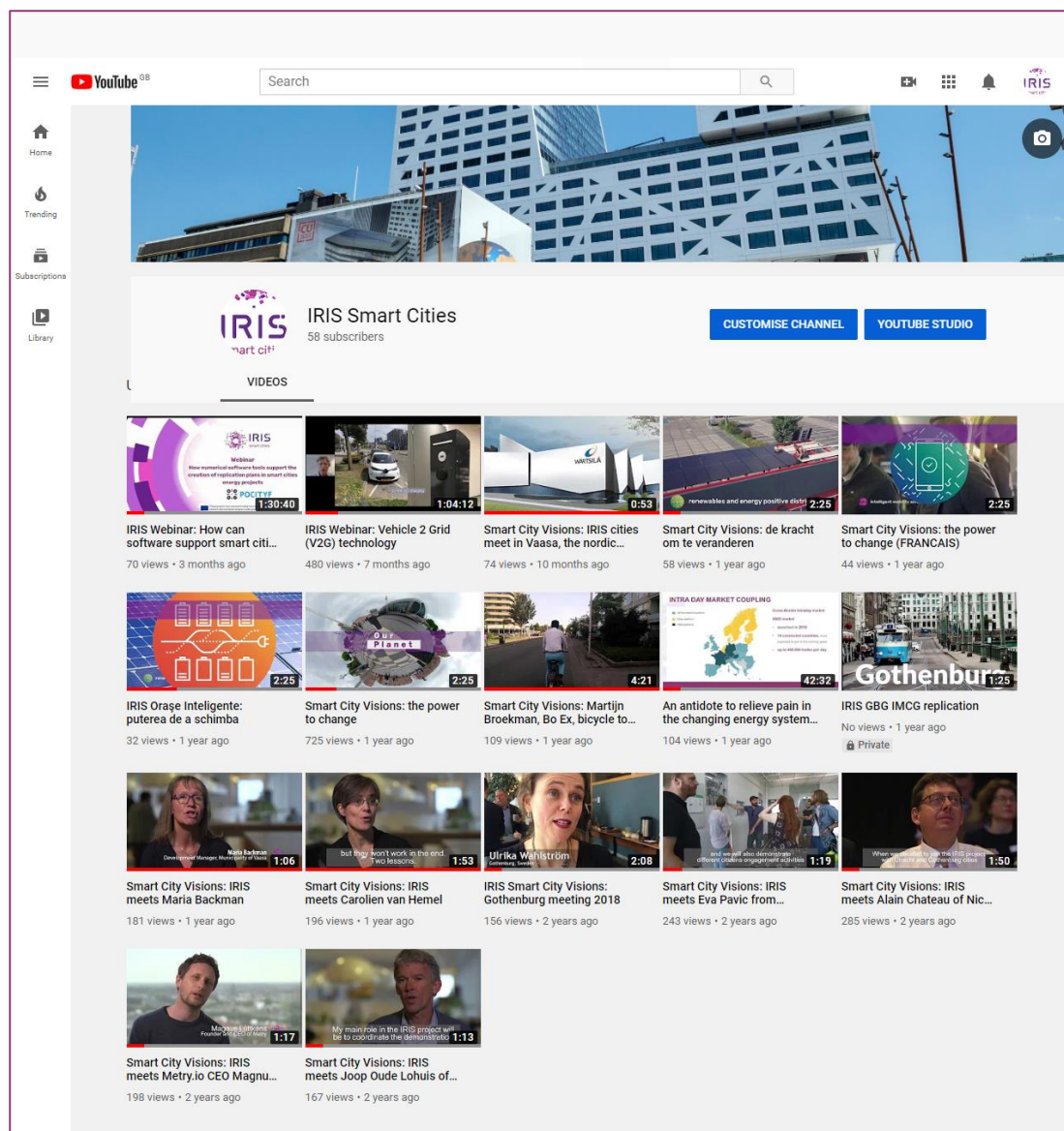


Figure 44 IRIS YouTube account

<sup>9</sup> [https://www.youtube.com/channel/UCVZPWV3\\_lx4xF1aXitY9E8w](https://www.youtube.com/channel/UCVZPWV3_lx4xF1aXitY9E8w)

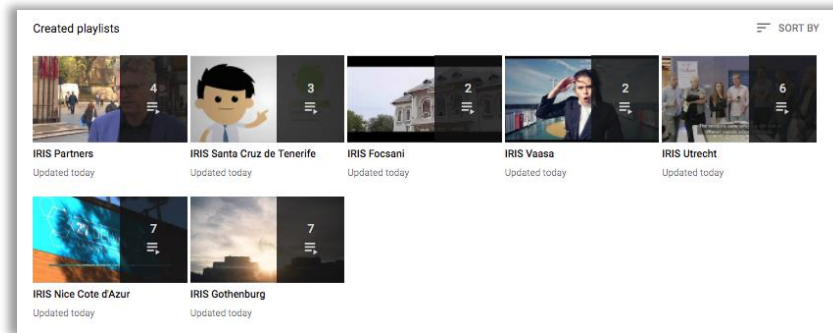


Figure 45 IRIS YouTube playlists

**IRIS YouTube channel was created in January 2018. Since then, 17 videos have been published.** Table 6 presents the main metrics of IRIS activity on YouTube.

Table 6 – Overview of the IRIS YouTube activity (1/1/2018 – 31/3/2019.)

Videos	Subscribers	Impressions	Views	Watch Time (hours)	Average View Duration (minutes)	Shares	Likes
17	58	13.016	3,052	105.3	2:04	161	58

YouTube offers detailed statistics about the performance of each video.

Video	Average percentage viewed	Average view duration	Views	Watch time (hours) ↓
<input type="checkbox"/> <b>Total</b>	<b>14.4%</b>	<b>2:04</b>	<b>3,052</b>	<b>105.3</b>
<input type="checkbox"/> IRIS Webinar: Vehicle 2 Grid (V2G) technology	10.6%	6:48	444 14.6%	50.3 47.8%
<input type="checkbox"/> Smart City Visions: the power to change	52.3%	1:15	712 23.3%	15.0 14.2%
<input type="checkbox"/> An antidote to relieve pain in the changing energy system? IRIS We...	9.2%	3:53	104 3.4%	6.8 6.4%
<input type="checkbox"/> Smart City Visions: IRIS meets Alain Chateau of Nice Center of Exc...	67.4%	1:14	284 9.3%	5.8 5.6%
<input type="checkbox"/> IRIS Webinar: How can software support smart cities and energy pr...	5.1%	4:36	69 2.3%	5.3 5.0%
<input type="checkbox"/> Smart City Visions: IRIS meets Carolien van Hemel	52.9%	0:59	196 6.4%	3.3 3.1%
<input type="checkbox"/> IRIS Smart City Visions: Gothenburg meeting 2018	53.6%	1:08	156 5.1%	3.0 2.8%
<input type="checkbox"/> Smart City Visions: IRIS meets Metry.io CEO Magnus Lüttkens	70.0%	0:53	193 6.3%	2.9 2.7%
<input type="checkbox"/> Smart City Visions: IRIS meets Eva Pavic from Johanneberg Scienc...	53.4%	0:42	240 7.9%	2.8 2.7%
<input type="checkbox"/> Smart City Visions: Martijn Broekman, Bo Ex, bicycle tour of Kanale...	32.3%	1:24	108 3.5%	2.5 2.4%
<input type="checkbox"/> Smart City Visions: IRIS meets Maria Backman	68.0%	0:44	181 5.9%	2.3 2.1%
<input type="checkbox"/> Smart City Visions: IRIS meets Joop Oude Lohuis of Utrecht Munici...	68.5%	0:49	160 5.2%	2.2 2.1%
<input type="checkbox"/> Smart City Visions: de kracht om te veranderen	42.3%	1:01	57 1.9%	1.0 0.9%
<input type="checkbox"/> Smart City Visions: the power to change (FRANCAIS)	41.5%	1:00	43 1.4%	0.7 0.7%
<input type="checkbox"/> Smart City Visions: IRIS cities meet in Vaasa, the nordic energy cap...	66.7%	0:35	72 2.4%	0.7 0.7%
<input type="checkbox"/> IRIS Orașe Inteligente: puterea de a schimba	48.9%	1:10	31 1.0%	0.6 0.6%

Figure 46 – IRIS YouTube videos metrics



Most of the viewers come from external sources and especial from LinkedIn and Twitter.

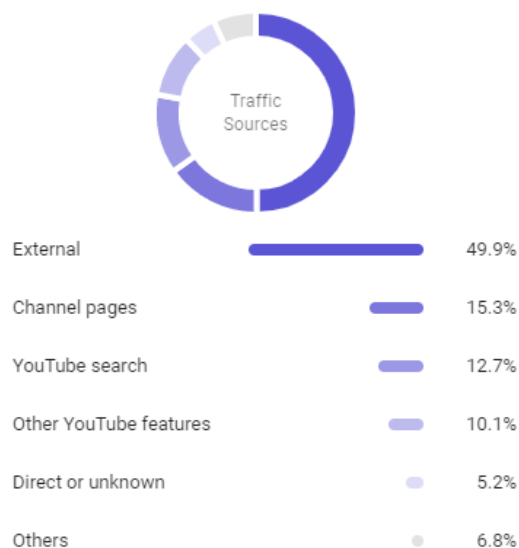


Figure 47 – IRIS YouTube traffic source types

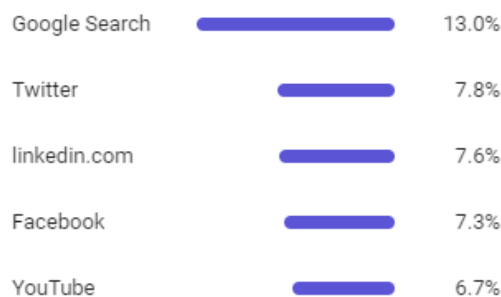


Figure 48 – IRIS YouTube external traffic source types

Like the other platforms, most of the visitors come from countries where an IRIS partner exists. However, the percentage of the viewers within the IRIS partners' countries dropped significantly comparing to the first 12 months of the project. This shows that the increasing dynamics of IRIS content distribution.

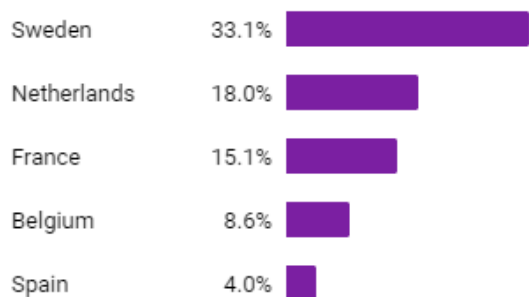


Figure 49 – IRIS YouTube visitors' top countries in M0-M12

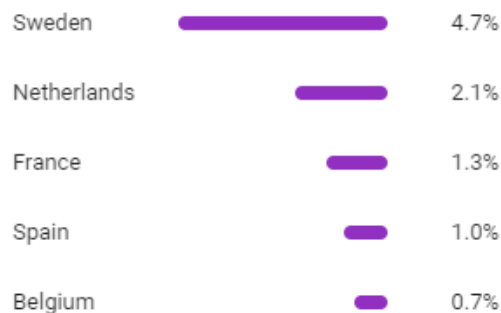


Figure 50 IRIS YouTube visitors' top countries in M0-M30

The popularity of the localised playlists follows the popularity in the IRIS partners' countries.



*Figure 51 - IRIS YouTube Playlist popularity*

## 3.6. SlideShare account

A SlideShare account gives an excellent organic search return and very international readership. In tandem with the IRIS LinkedIn account, it is a powerful tool for reaching professional dissemination targets and highly interested members of the public (Figure 52).

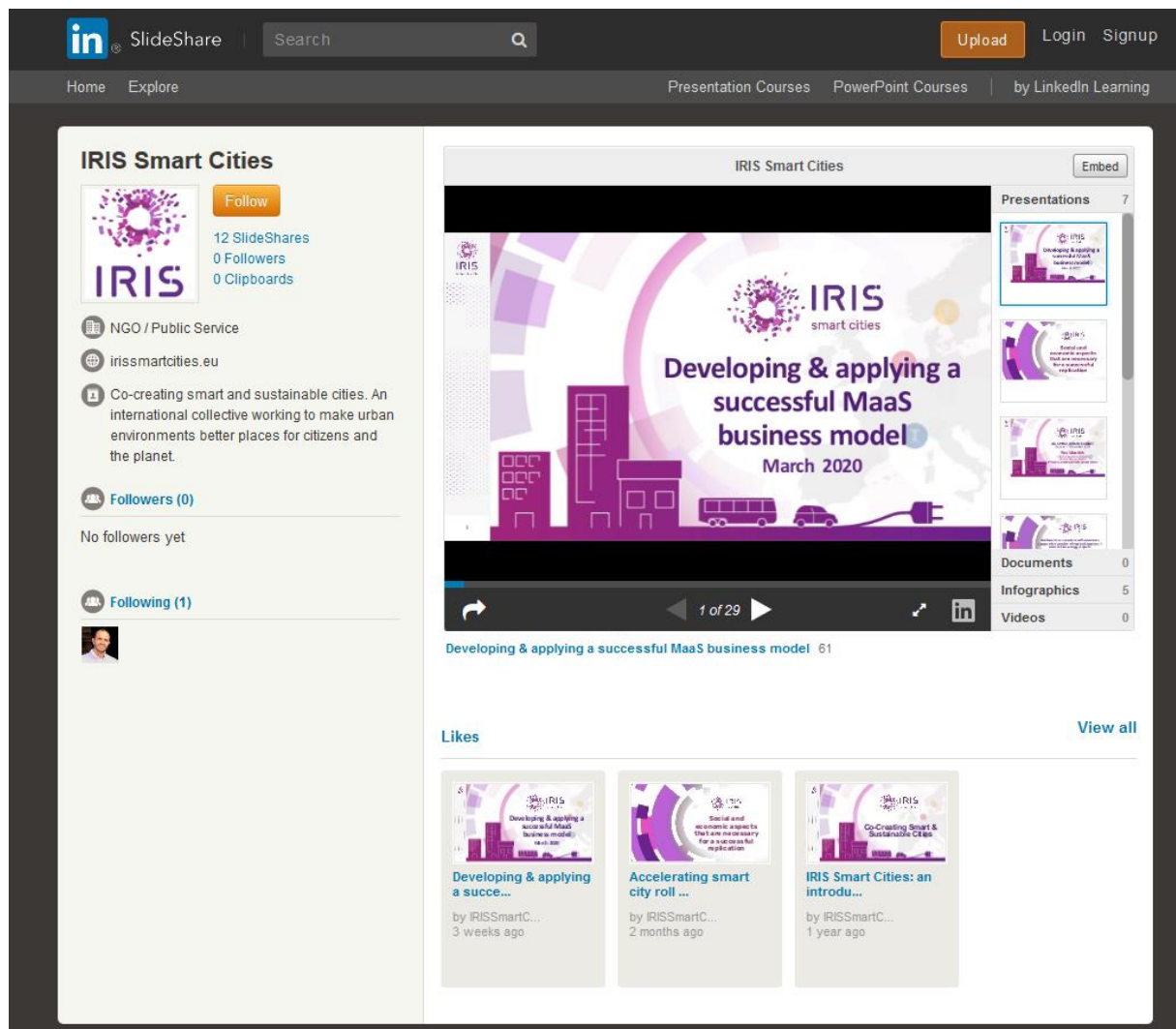


Figure 52 – IRIS SlideShare account

IRIS has published 12 SlideShares that contain 7 presentations (Figure 53) and 5 infographics (Figure 54). The published content has 52.053 views during the reporting period.

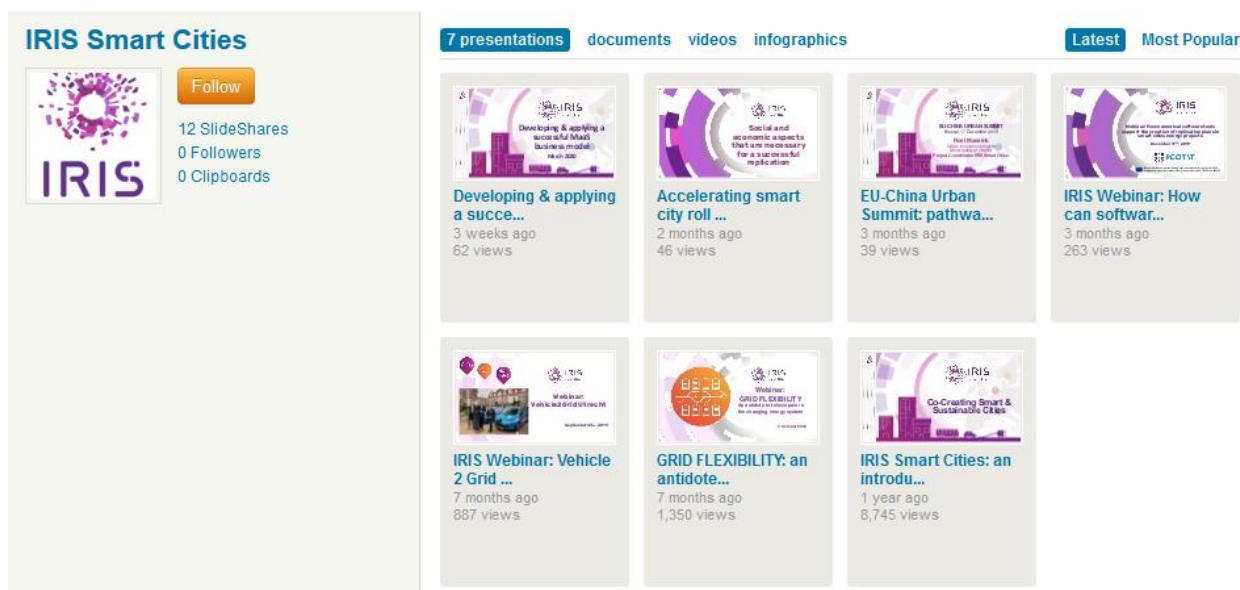


Figure 53 – IRIS SlideShare presentations

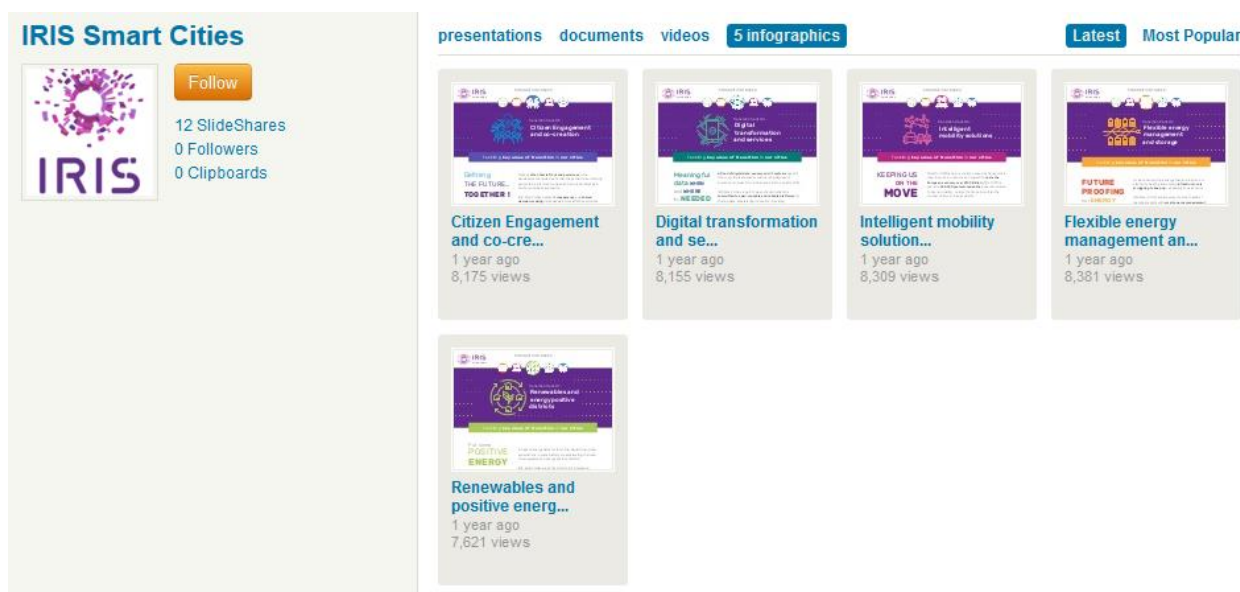


Figure 54 – IRIS SlideShare infographics

Among the IRIS publications, infographics are the most popular. Figure 55 shows the IRIS SlideShare publications' views per month and most popular publications for the 1<sup>st</sup> year of the account operation (March 2019 – February 2020).





Figure 55 – IRIS SlideShare publications' views per month & most popular publications

An interesting remark about the IRIS SlideShare account is that it is popular not only in countries where an IRIS partner exists but also in other countries like the United States and the United Kingdom (Figure 56).

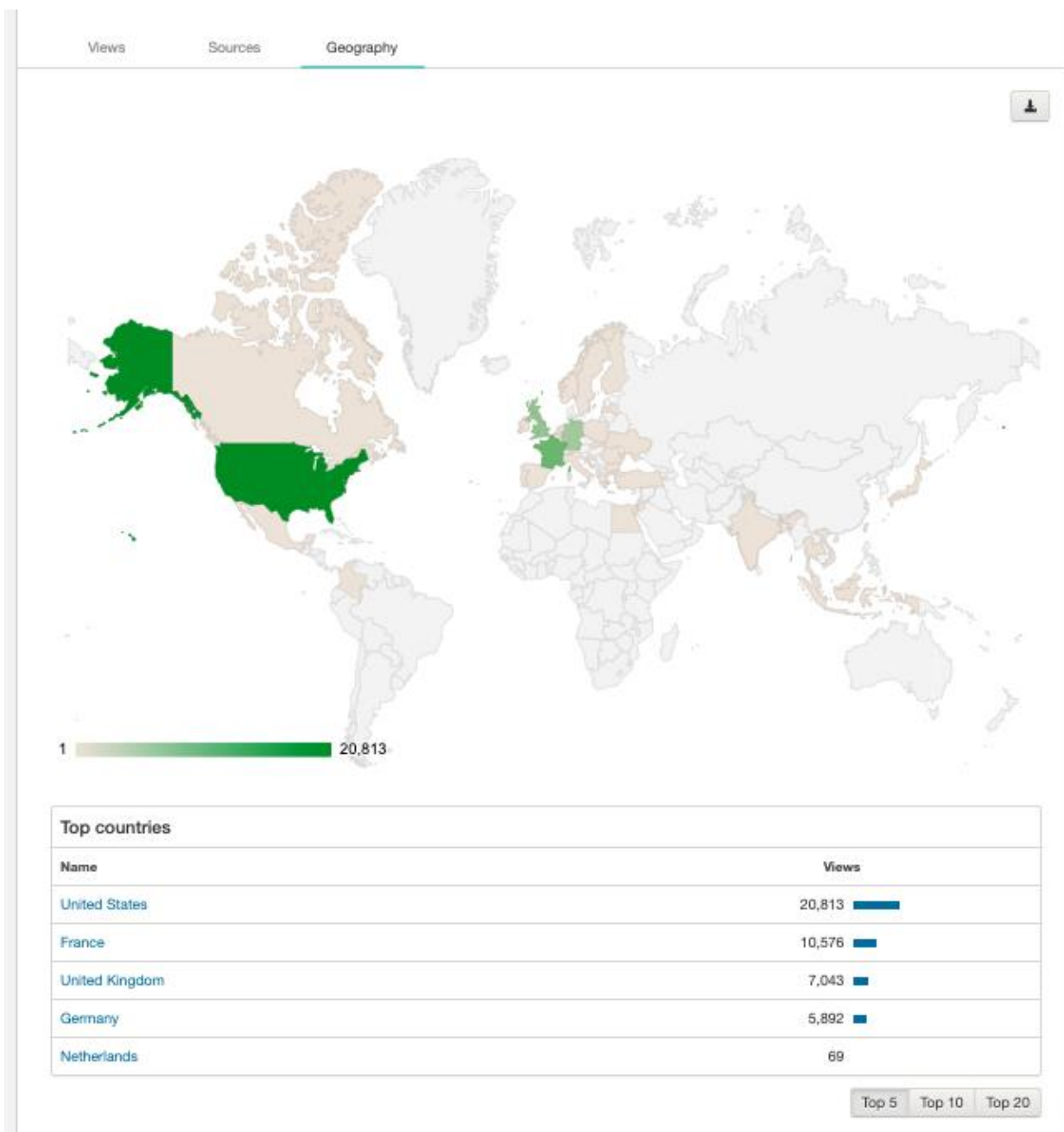


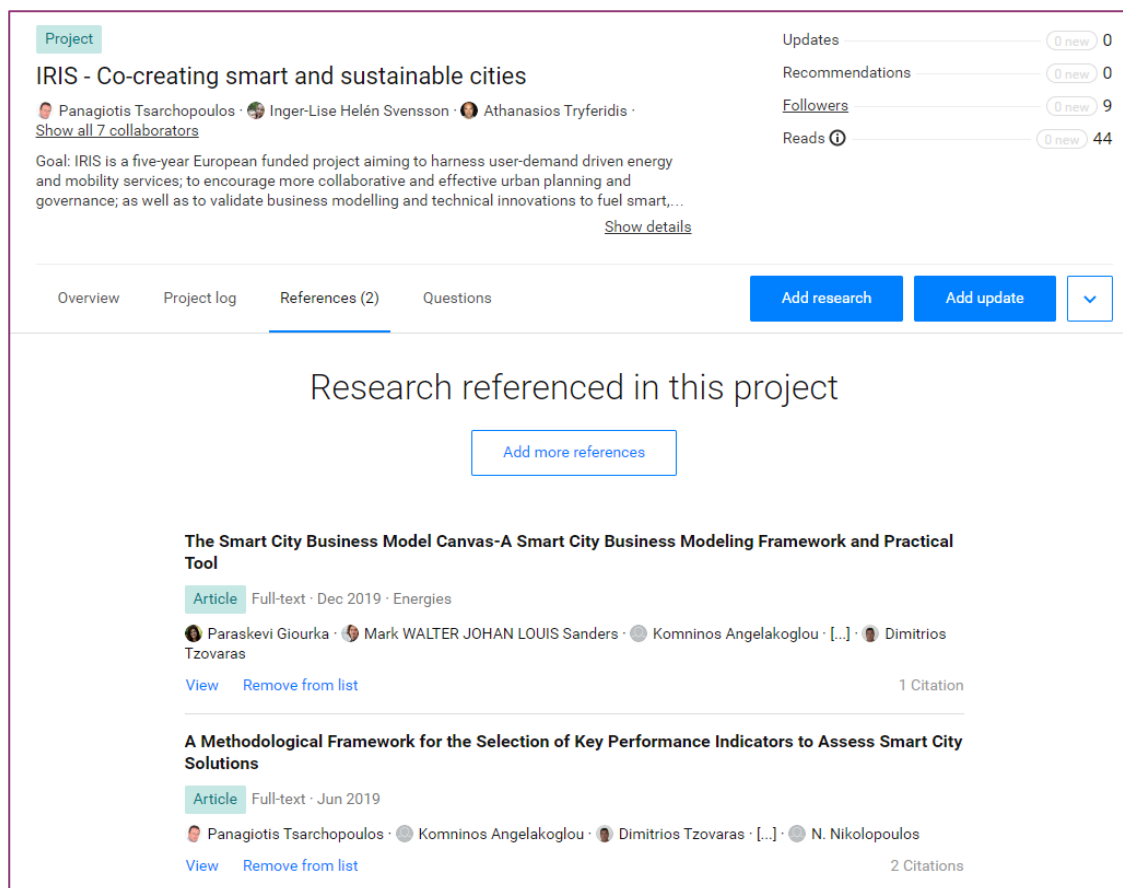
Figure 56 – IRIS SlideShare publications' views per country



### 3.7. ResearchGate Project Page

ResearchGate is a professional network for scientists and researchers. Over 17 million members from all over the world use it to share, discover, and discuss research<sup>10</sup>. The platform's mission is to connect the world of science and make research open to all.

Many researchers from the IRIS partners have accounts to ResearchGate and publish their academic papers. The IRIS ResearchGate project page<sup>11</sup> aims to use the connections of these researchers to promote the project's academic publications (Figure 57).



The screenshot shows the ResearchGate project page for "IRIS - Co-creating smart and sustainable cities". The page header includes the project title, collaborators (Panagiotis Tsarchopoulos, Inger-Lise Helén Svensson, Athanasios Tryferidis), and a goal statement. On the right, there are statistics: Updates (0 new), Recommendations (0 new), Followers (9 new), and Reads (44 new). Below the header, there are tabs for Overview, Project log, References (2), and Questions. The "References" tab is active, showing two articles: "The Smart City Business Model Canvas-A Smart City Business Modeling Framework and Practical Tool" and "A Methodological Framework for the Selection of Key Performance Indicators to Assess Smart City Solutions". Each article entry includes the title, type (Article), date, collaborators, and citation count.

Figure 57 IRIS Project Page on ResearchGate

Table 7 presents the main metrics of the IRIS activity in ResearchGate.

Table 7 – Overview of IRIS ResearchGate activity (1/6/2019 – 31/3/2019.)

Publications	Collaborators	Followers	Reads
2	7	9	44

<sup>10</sup> About ResearchGate <https://www.researchgate.net/about>

<sup>11</sup> <https://www.researchgate.net/project/IRIS-Co-creating-smart-and-sustainable-cities>



## 3.8. Instagram account

Instagram is a fast evolving and dominant picture-sharing platform that increasingly allows people and organisations the possibility to develop visual and editorial content. The development of the 'stories' features an ability to establish a project personality among new demographics and audiences. A key content thread on Instagram will be to profile the 'humans behind' smart cities: the technicians and academics, but also businesses, communities and residents of IRIS.

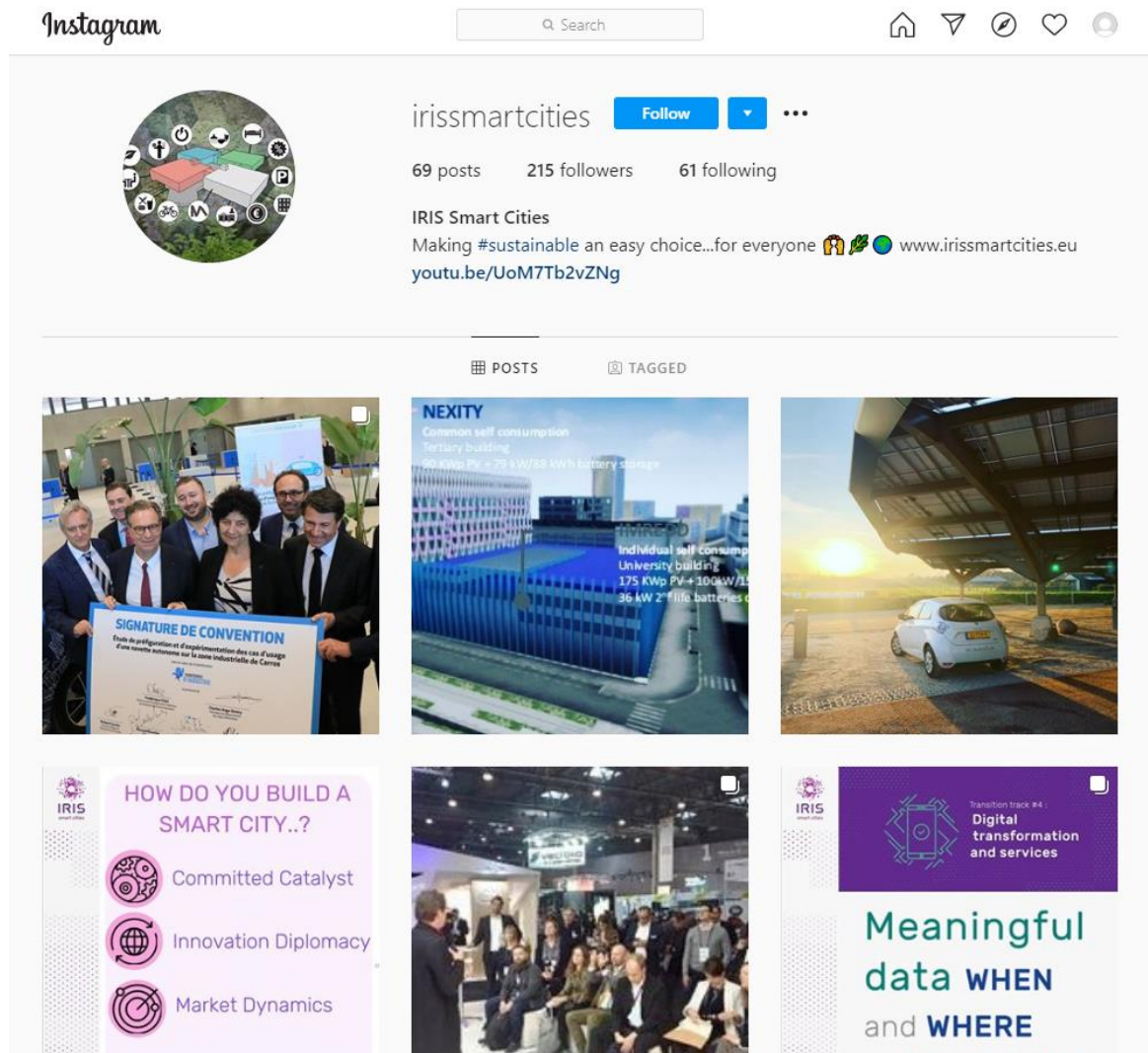


Figure 58 IRIS Instagram account

IRIS Instagram account<sup>12</sup> has 215 followers until 31 March 2020. 69 posts have been published which have received 799 likes. The audience comes mainly from IRIS partners' countries, but with some surprising impact from unexpected global enthusiasts for smart city issues.

<sup>12</sup> <https://www.instagram.com/irissmartcities/>



## 4. Conclusions - Recommendations

Based on a solid Communication and Dissemination (C&D) strategy, the IRIS project has built a strong online presence. The project's website, used as a 'digital anchor' for IRIS content, is the central pillar of the C&D strategy. During the first half of the project, the website had 19.020 visitors. IRIS is active in Twitter, LinkedIn, YouTube, SlideShare, ResearchGate and Instagram. The project uses the unique characteristics and audiences of each platform to distribute specific content better and connect with influencers. Twitter is the flagship platform in social media, where the @IRISsmartcities account has more than 1.000 followers and 750.000 impressions. Apart for Twitter, IRIS is also popular in the other platforms with 523 followers and 45.789 impressions in LinkedIn; 3.052 video views in YouTube's interviews and webinars; and 52.053 views in SlideShare's presentations and infographics.

The project uses a variety of online tools to monitor and evaluate its online activities. The analysis of monitoring data collected from the website and social media accounts shows that, during the first half of the project, IRIS published online a significant amount of content (deliverables, video, visuals, social media updates, journalistic articles, citizen journalism and news releases), which is widely accepted by the users.

The IRIS project achieved its C&D goals for the reporting period, as it managed to establish its presence in the field of smart and sustainable cities (be visible) and to exploit the achieved results so far by distributing more editorials, articles and deliverables (be credible).

Based on a successful start, IRIS will be able to achieve the main C&D goal for the 2<sup>nd</sup> half of the project that is to be a source of knowledge and inspiration in the field of smart and sustainable cities. The main pillar for this success is the expected project's results. Lighthouse cities achievements, online and offline tools, best practices, solution factsheets, academic publications, webinars, the replication roadmap, and replication plans constitute a rich pull of resources for communication and dissemination. To increase the visibility of these results, the project must create a new website, complementary to the existing official <https://www.irissmartcities.eu/>. To capitalise the widely known by the Twitter campaign #SmartCityVisions hashtag, the new website could be available at smartcityvisions.eu. This website should be open to other European projects, as well as to experts in the field, to publish their visions towards smart and sustainable cities. The combination of the new content-rich website with the already established social media channels will boost the visibility and acceptance of the IRIS project's results not only at a European level but also worldwide.



## 5. References

About Google Search Console. (2020). Retrieved from Google Search Console: <https://search.google.com/search-console/about>

Dietrich, G. (2014). *Dietrich, Gini. Spin sucks: Communication and reputation management in the digital age*. Que Publishing.

Digimind - Social Listening Platform. (2020). Retrieved from Digimind: <https://www.digimind.com/social-listening>

Google Analytics. (2020). Retrieved from Google Marketing Platform.

Hootsuite Platform. (2020). Retrieved from Hootsuite: <https://hootsuite.com/platform>

IRIS Project. (2017). *D10.1 Communication and dissemination plan with conference agenda*.

IRIS Project. (2018). *D10.10 First update of communication and dissemination plan*.

Social Media Monitoring. (2013). Retrieved from Techopedia.

Tweepstap. (2020). Retrieved from Crunchbase: <https://www.crunchbase.com/organization/tweepstap>

Usage statistics of traffic analysis tools for websites. (2020). Retrieved from W3Tech.