

**Grant Agreement No.:** 760941

**Project acronym:** RESISTANT

**Project title:** Large riblet surface with super hardness, mechanical and temperature resistance by nano functionalization

**Call (part) identifier:** H2020-NMBP-PILOTS-2017

**Topic:** PILOTS-03-2017 Pilot lines for manufacturing of nanotextured surfaces with mechanically enhanced properties

**Starting date of project:** 1<sup>st</sup> of January, 2018

**Duration:** 48 months

## **WP 10 – Dissemination**

### **Deliverable D10.4 – Report on Dissemination and Communication activities I**

Due date of deliverable: **31<sup>st</sup> December 2018**

Actual submission date: **27<sup>th</sup> December 2018**

**Organisation name of lead contractor for this deliverable:** PRODINTEC

Dissemination Level		
CO	Confidential, only for members of the consortium (including the Commission Services)	
PU	Public	X

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## List of abbreviations / Nomenclature

Abbreviation	Definition
WP	Work package
GA	General Assembly

# 1 Introduction

The present document constitutes Deliverable D10.4 in the framework of the project “Large Riblet Surface with Super Hardness, Mechanical and Temperature Resistance by Nano Functionalization” (Project Acronym: ReSiSTant; Contract No.: 760941). This document is the result of the activities performed within the framework of work package 10 (WP10): “Dissemination”, and more specifically of Task 10.1 “Dissemination strategy and implementation” and Task 10.2 “Release and maintenance of a public website” led by PRODINTEC and in collaboration with the rest of the consortium partners.

ReSiSTant intends to develop, upscale and industrially demonstrate up to TRL7 reliable manufacturing processes to obtain nanostructured riblet surfaces to be applied in Aircraft Turbofan Engines and Industrial Compressors (two demonstrators) to reduce drag and the related fuel consumption and emissions. In this sense, the main aim of the dissemination activities – reported in the present document - is to create a suitable framework for awareness following a coherent strategy, including:

- ▶ To spread ReSiSTant project results and its deliverables beyond the consortium among relevant stakeholders, scientific and industrial community.
- ▶ To perform networking actions that foster dialogue inside and outside RDI and industrial communities to facilitate cooperation among other NMBP Pilot topic projects.
- ▶ To improve awareness of the potential and environmental benefits when nanocoatings/materials are used in turbomachinery manufacturing, as well as the existing European knowledge, capabilities and developments among stakeholders

The website will be updated during the project and will be active for at least a year after the project. All partners from the consortium will provide content to update the website. A methodology for a regular collection of content will be provided.

This document describes in detail the set of Dissemination and Communication activities during the first year of the project (Month 1 (January 2018) to Month 12 (December 2018)).

## 2 Online activities

This section includes all the online activities carried out by ReSiSTant consortium for project dissemination.

### 2.1 Creation of the website, project identity and public image

As detailed on Deliverable D10.2. *Public Website online*, the WP10 Leader (PRODINTEC) was responsible of project identity and public identity, as well as, the creation of the website. All partners contributed to create the content (text and images). The project website is accessible through [1] and it is valid for PCs or laptops as well as for mobile devices. Figure 1 shows the web appearance under both types of devices.

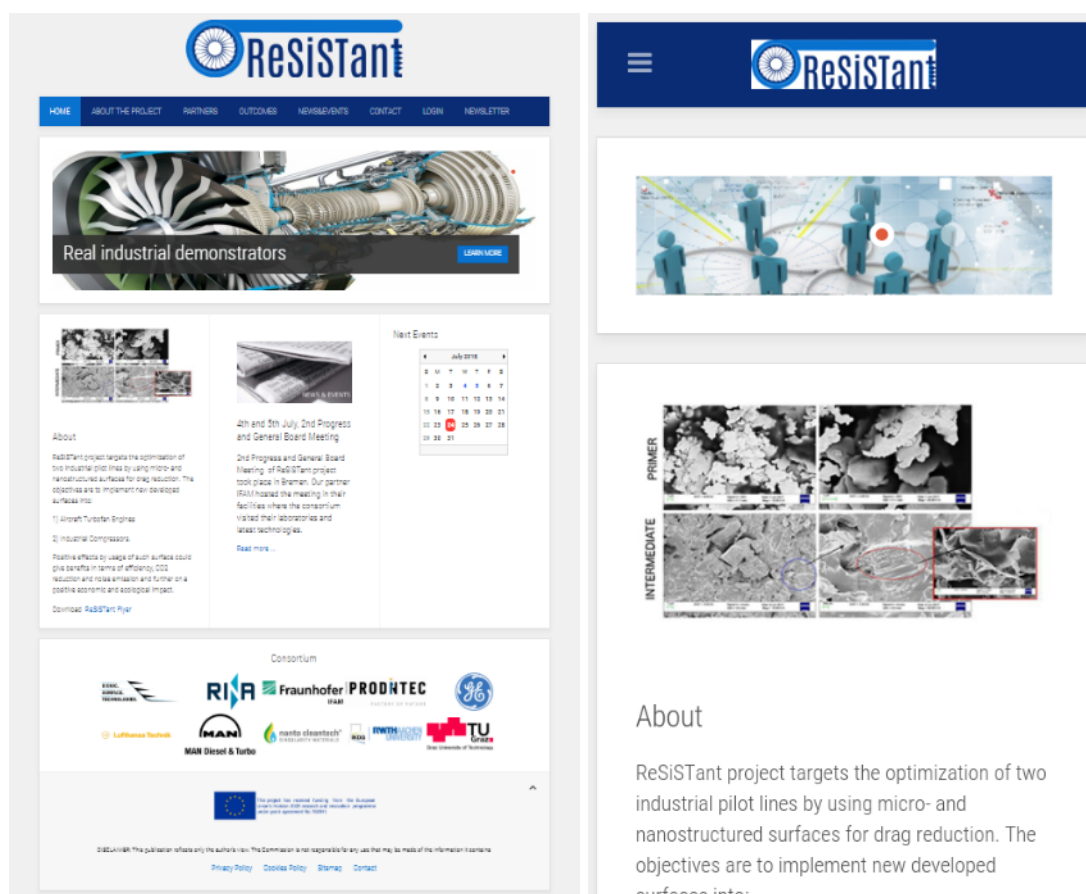


Figure 1. ReSiSTant website: Screenshot from PC/Laptop (left) and from mobile (right)

The website is user friendly and is structured on the following sections: (1) *Home*, (2) *About*, (3) *Partners*, (4) *Outcomes*, (5) *News&Events*, (6) *Contact*, (7) *Login* and (8) *Newsletter*. The website is updated with regular information, such as:

- ▶ *Home* section includes updates on the latest news and events (calendar).
- ▶ *Outcomes* section includes public project deliverables.
- ▶ *News&Events* section details relates project news.
- ▶ *Next events* includes a calendar where relevant events are updated.

There is also a Member area which is private and exclusive for project partners. It is accessible through *Login* section.

## 2.2 Project promotional materials / communication toolkit

Since the project beginning some promotional materials and a communication toolkit have been prepared as presented below:

- **Project promotional material:** at this moment, a poster / flyer (Figure 2) has been created for a general audience. It includes general information of the project such as objectives, roadmap, consortium or website. During the project, new versions will be created according to target audiences. During the period Month 1 to Month 12, this flyer was updated due to changes on partner's logo (MAN Energy Solutions, former MAN Diesel and Turbo).

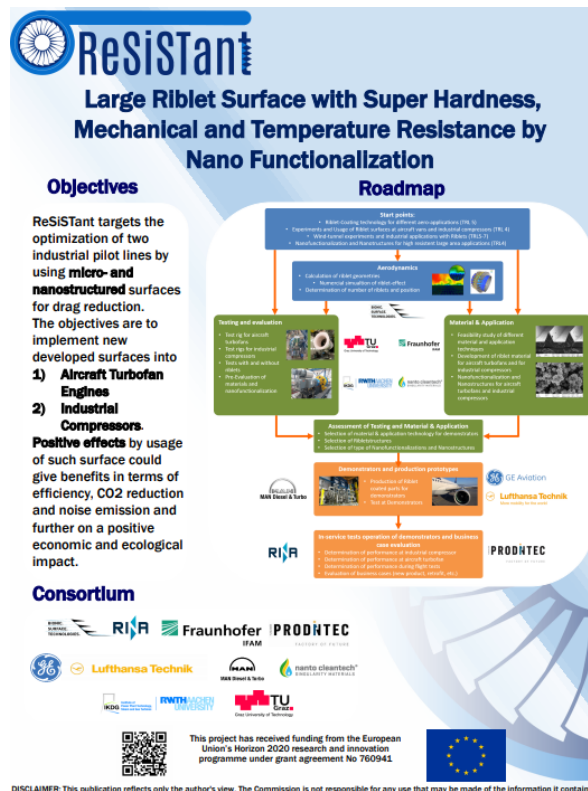


Figure 2. ReSiSTant flyer / poster (1<sup>st</sup> version)

This flyer/poster can be found in an electronic manner, through the project website (section Outcomes:[2]) as shown on Figure 3. At the moment, an updated version can be found on the website.



Figure 3. ReSiSTant website – Outcomes section

- **Communication toolkit:** this is an exclusive set of documents for the consortium and it is accessible through the Member area. It includes project logo, presentation template and project flyer/poster. This communication toolkit is updated when new versions of the documents are created. At this moment, two versions of the communication toolkit were created due to changes of partner's logo.
- **Other documents:** related project documents (templates for meeting minutes or project reports) include the project logo in order to provide a unique project image.

## 2.3 Project media presentations and distribution of press release

In September 2018, WP10 Leader (PRODINTEC) provided the **first project press release** to ReSiSTant partners (English version), agreed and reviewed by all partners. The translation of press release to official languages of the rest of partners is responsibility of each partner. This first press release (English version) can be found at Outcomes section on the project website.

WP10 Leader (PRODINTEC) has translated this press release to Spanish. ReSiSTant press release (both English and Spanish version) were published in PRODINTEC website: 1. Spanish: [3]; 2. English: [4]

The press release was sent to local media. When submitting this deliverable, the project was published in a regional newspaper called "La Nueva España" in Spain, 30th November 2018 [42]. Figure 4 shows an extract of such new.

### Prodintec participa en el diseño de nanoestructuras para motores de avión

Los gijoneses, la única presencia española en un consorcio de diez miembros para estos desarrollos

Luján PALACIOS  
La Fundación Prodintec, especializada en soluciones innovadoras para la industria 4.0, participa a través de su Unidad de Industria Digital en el Proyecto de innovación europeo "ReSiSTant". El proyecto tiene una duración de cuatro años con el objetivo de utilizar superficies nano y micro estructuradas para la reducción de la fricción en piezas industriales. Estas nuevas superficies, más resistentes gracias a su estructura, se podrán utilizar en motores de reacción de aeronaves y compresores industriales, y se espera que tenga efectos positivos en términos de eficiencia, reducción de CO<sub>2</sub> y emisión de ruido, además de un impacto positivo en términos económicos y ecológicos.

Tanto las nanoestructuras como las nanopartículas se probarán en dos líneas demostradoras para hacer ver la posibilidad de una producción a gran escala y

para combinar diferentes tecnologías de proceso en la cadena de producción. Del mismo modo se instalará un demostrador industrial para la producción de compresores industriales y motores de reacción para aviones. Todo el conocimiento generado se explotará para comenzar a producir a gran escala, en toda la Unión Europea y buscando una producción estándar con el objetivo de empezar a comercializar los productos a partir de 2025.

El proyecto está liderado por tres empresas que trabajan a nivel global: MAN Energy Solutions (MAN ES), un líder mundial de mercado en el ámbito de los compresores industriales; GE Aviation (GEDE), una de las compañías líderes a nivel mundial en el desarrollo e investigación de turbinas a reacción de alta eficiencia, y Lufthansa Technik AG (LTH), una compañía líder de mantenimiento, reparación y revisión de aeronaves que cubre el

Figure 4. ReSiSTant new published in "La Nueva España" (extract)



## 2.4 Periodic e-newsletter

**Periodic e-newsletters** have been created during the first year of the project. This year, two e-newsletters were created and distributed:

- 1<sup>st</sup> e-newsletter: this was the first project e-newsletter and it was distributed among partners on the 8th of May 2018. The content and structure is shown on Figure 5 and it includes:
  - Project logo: by clicking it, the user is redirected to project website.
  - Title: “eNewsletter – April’18”.
  - Latest news: informing about project Kick-Off Meeting and a link to the related entry on the project website. Information about the ReSiSTant flyer that is available and the direct link to the website where it can be found; Events where the project was presented (GR-Expo).
  - Consortium: logos of the partners, to show an overview of its potential.
  - “Visit us” button: easy and user friendly manner to increase website accesses.
  - EC logo and project information: mandatory information about EC funding and project information according to Grant Agreement.
  - Subscribe / unsubscribe: two direct links were included in order to facilitate the subscription or un-subscription from the newsletter contact list.
- 2<sup>nd</sup> e-newsletter: this was the second newsletter and it was distributed among partners. Based on the impact of the first newsletter, several improvements were implemented as detailed below. This newsletter is longer than the first one as more content exists and the structure was performed to improve the impact of the previous newsletter as shown on Figure 6 and Figure 7.
  - Project logo: by clicking it, the user is redirected to project website.
  - Title: “eNewsletter – October’18”.
  - Latest news: informing about project 2<sup>nd</sup> General Assembly in Bremen and a link to the related entry on the project website. Information about past events where project partners presented the project (BTS in California and NCT in Washington).
  - Recent project outcomes: the deliverables which were published recently, can be found on this section, through a link to the project website where they can be downloaded. – *This new section was created in order to increase the number of project downloads.*
  - Where can you find us?: information about coming events which will be attended by project partners and where ReSiSTant project will be presented somehow. It includes direct links to website calendar where such events are detailed. – *This new section was created to inform target audience about future events where ReSiSTant project and partners will be present.*
  - Do you want to be updated?: instructions about how the interested audience can register themselves within the newsletter distribution list - *This new section was included due to the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) and its applicability from May 2018. Thus, interested profiles need to register on “Newsletter tab” proactively if they want to receive the newsletter directly. If not, they can check it through the website by downloading it through Outcomes section.*



- Consortium: logos of the partners, to show an overview of its potential.
- “Visit us” button: easy and user friendly manner to increase website accesses.
- EC logo and project information: mandatory information about EC funding and project information according to Grant Agreement.
- Social Media sharing tools: some direct links to share the newsletter through Twitter or by e-mail were included at the end of the newsletter – *This new section was included to increase the access and views of the online newsletter.*



Figure 5. 1<sup>st</sup> ReSiSTant e-newsletter

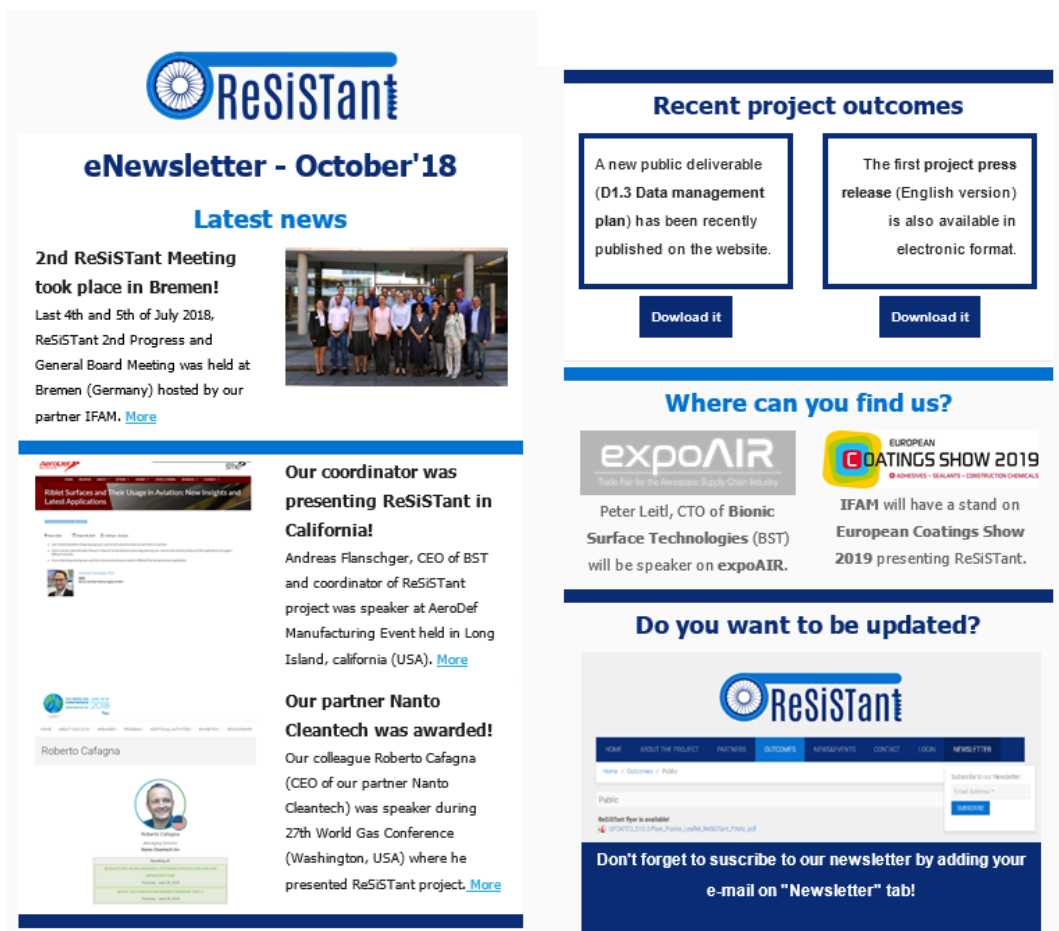


Figure 6. 2<sup>nd</sup> ReSiSTant e-newsletter (I)



Figure 7. 2<sup>nd</sup> ReSiSTant e-newsletter (II)

The newsletters has been shared through social media as detailed on section 2.5.

## 2.5 Social networking tools

All partners have contributed to make the project is preset on social media. Next, a review of activities carried out, using social networking tool selected on the project dissemination plan.

Table 1. List of ReSiSTant activities in social networking tools

#	Type	Date	Description	URL
1	Twitter - Prodintec	January 2018	Publication of ReSiSTant KoM in Graz (#ReSiSTant #H2020)	[5]
2	IFAM Home	June 2018	Projects at Fraunhofer IFAM website	[6]
3	LinkedIn-Prodintec	May 2018	Nuria Rodriguez from Prodintec (LinkedIn profile) has shared the project flyer and to the link where it can be downloaded.	[7]
4	LinkedIn-BST	May 2018	Andreas Flanschger from Bionic Surface Technologies (LinkedIn profile) has disseminated project flyer.	[8]
5	NCT Website	January 2018	News in Newsroom area of NantoCleantech website	[9]
6	Twitter - NCT	January 2018	Tweet about ReSiSTant KoM in Graz (hashtag used #H2020 #aircraft) from NantoCleanTech twitter account.	[10]
7	Twitter - NCT	May. 2018	NantoCleanTech retweets Prodintec status	[11]
8	Twitter - NCT	June 2018	Tweet about ReSiSTant website and newsletter including project flyer from NantoCleanTech twitter account.	[12]
9	Prodintec Home	July 2018	New related to the project, included on PRODINTEC Newsletter July 2018	[13]
10	METALIA website	July 2018	Project information (as PRODINTEC Newsletter)	[14]
11	Twitter - IFAM	July 2018	Info about Bremen GA meeting	[19]
12	Facebook-IFAM	July 2018	Article about Project Meeting in Bremen including picture	[17]
13	Twitter - NCT	July 2018	Info about Bremen GA meeting	[20]
14	Twitter - NCT	July 2018	Info about Bremen GA meeting	[21]
15	1st Press release	September 2018	Press release (English version) sent to partners.	[15]
16	1st Press Release	October 2018	Press release (Spanish version) shared through PRODINTEC website.	[16]

#	Type	Date	Description	URL
17	Twitter - Prodirtec	November 2018	Information about project 1 <sup>st</sup> press release from Prodirtec Twitter account.	[18]
18	Twitter - NCT	October 2018	Info about 2 <sup>nd</sup> project newsletter from NantoCleanTech Twitter account.	[22]
19	Twitter - NCT	October 2018	Info about 2 <sup>nd</sup> project newsletter from NantoCleanTech Twitter account.	[23]
20	Twitter - Prodirtec	November 2018	Info about 2 <sup>nd</sup> newsletter from Prodirtec Twitter account.	[24]
21	LinkedIn - Prodirtec	November 2018	Info about 2 <sup>nd</sup> newsletter from Prodirtec LinkedIn account.	[25]
22	RINA	2018	Publication of the project case study	[41]

Next, an overview of main activities of the project related to social networking tools. Figure 8 shows a sample of ReSiSTant publications done in **LinkedIn**.

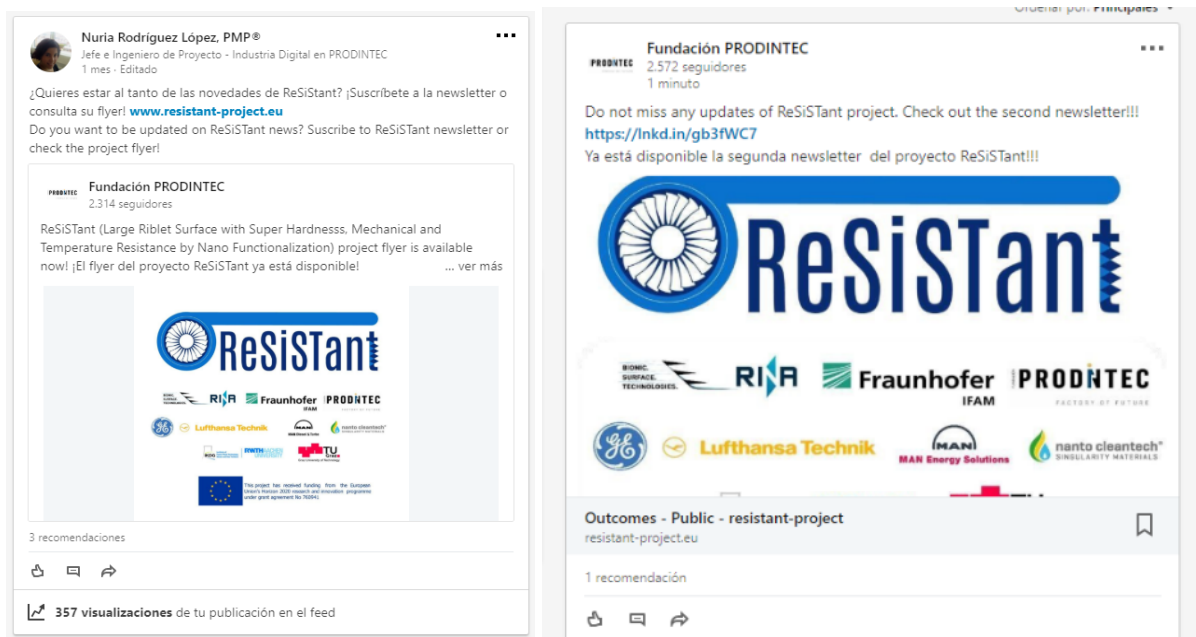


Figure 8. Samples of ReSiSTant publications on LinkedIn

Likewise, ReSiSTant is also present in other social media such as Twitter or Facebook. Figure 9 shows a sample of project publications carried out on **Twitter**. In addition, Figure 10 shows of project publications done on **Facebook**.



Figure 9. Samples of ReSiSTant publications on Twitter



Figure 10. Sample of ReSiSTant publications on Facebook



## 2.6 Project information distribution and related news

The **partners** have already distributed the project **through their own website**, such as:

- **BST** has included information about the project [26] and about the Kick-Off Meeting held in Gratz [27].
- **IFAM** has included information about the project on their own website, on a section related to its R&D projects [28].
- **PRODINTEC** has published a new related to the project [29].
- **NANTO** has published information about this project within the section Horizon 2020 found on its website [30].
- **RINA** has published information about the Project on their Case Study section within RINA website [41].

Figure 11 shows a selection of main ReSiStant project publications that can be found on partners' website.

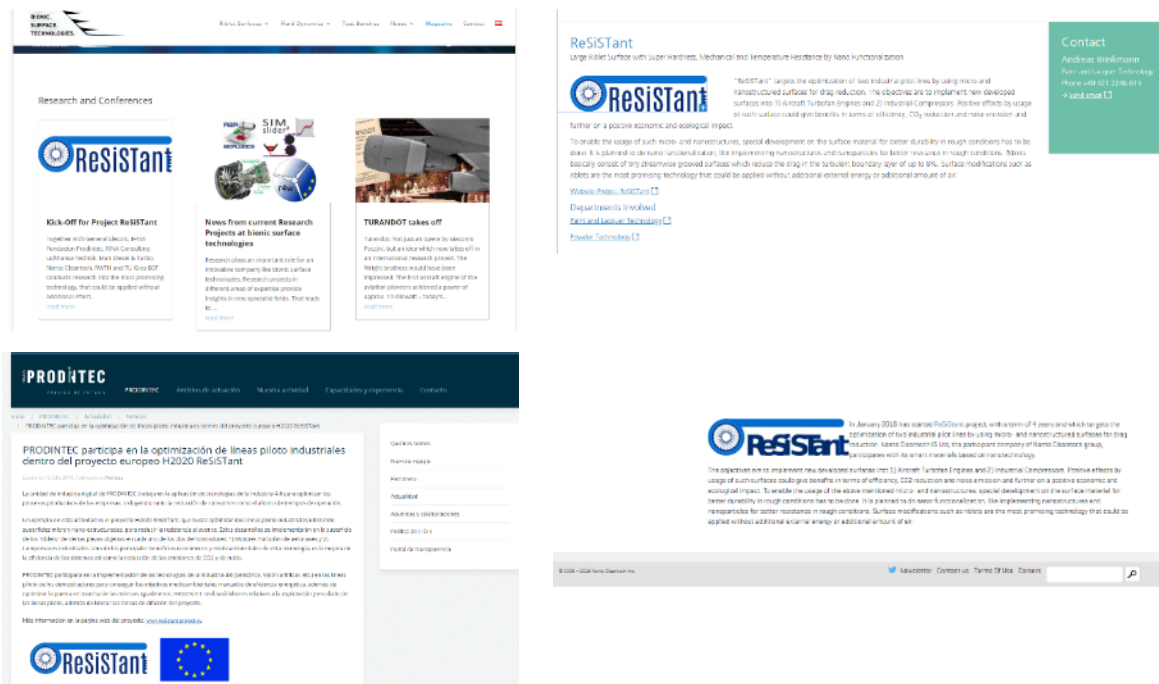


Figure 11. Selection of ReSiStant publications on partners' websites

In addition, some partners have included information of ReSiStant project within some of their regular **newsletters**. This is the case of PRODINTEC which included a reference to ReSiStant project on July 2018 PRODINTEC newsletter (Figure 12).






[PRODINTEC aplica tecnologías de la Industria 4.0 para optimizar procesos productivos de líneas piloto industriales.](#)

En el marco del proyecto Europeo H2020 ReSiSTant, PRODINTEC implementa tecnologías de la Industria 4.0, como la automatización de procesos, en dos líneas piloto para conseguir los objetivos medioambientales marcados en la producción de motores de aeronaves y compresores industriales. Además, busca optimizar la producción en materia de las líneas.

Figure 12. ReSiSTant new on PRODINTEC newsletter (July 2018)

The project can be found on **CORDIS** website, provided by European Commission [31], as shown on Figure 13.

[HOME](#) [NEWS & EVENTS](#) [PROJECTS & RESULTS](#) [RESEARCH\\*EU MAGAZINES](#)


**ReSiSTant**  
 Project ID: 760941  
 Funded under:  
[H2020-EU.2.1.2. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Nanotechnologies](#)

**Large Riblet Surface with Super Hardness, Mechanical and Temperature Resistance by Nano Functionalization**  
 From 2018-01-01 to 2021-12-31, ongoing project

Project details	
<b>Total cost:</b> EUR 6 469 650.01 <b>EU contribution:</b> EUR 5 485 000 <b>Coordinated in:</b> Austria	<b>Topic(s):</b> <a href="#">PILOTS-03-2017 - Pilot Lines for Manufacturing of Nanotextured surfaces with mechanically enhanced properties</a> <b>Call for proposal:</b> <a href="#">H2020-NMBP-PILOTS-2017</a> <a href="#">See other projects for this call</a> <b>Funding scheme:</b> IA - Innovation action

**Objective**  
 "ReSiSTant" targets the optimization of two industrial pilot lines by using micro- and nanostructured surfaces for drag reduction. The objectives are to implement new developed surfaces into 1) Aircraft Turboman Engines and 2) Industrial Compressors. Positive effects by usage of such surface could give benefits in terms of efficiency, CO2 reduction and noise emission and further on a positive economical and ecological impact. To enable the usage of such micro- and nanostruc...

**Coordinator**  
 BIONIC SURFACE TECHNOLOGIES GMBH  
 BROCKMANNGASSE 49  
 8010 GRAZ  
 Austria  
[See on map](#)  
**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)  
[Contact the organisation](#)


Austria   
**EU contribution:** EUR 463 137,50

Figure 13. ReSiSTant information on CORDIS website

The **EPPN project** [32] is oriented to create a European Network for Pilot Production Facilities and Innovation Hubs. This project aims to collect and centralise the information of other pilot lines related projects funded by European Commission. The EPPN website is shown on Figure 14.

[HOME](#) [ABOUT](#) [CONTACT](#) [PILLOT LINES](#) [INDUSTRIAL LEADERSHIP](#) [EUROPEAN NETWORK](#) [EUROPEAN COMMISSION](#) [EUROPEAN UNION](#)

Leading facilities, technology providers, innovators, business, developing technology, process, the concept networks...

**European Network For Pilot Production Facilities And Innovation Hubs**

142 **PILOTS** 41 **INDUSTRIAL LEADERSHIP** 1243 **EUROPEAN NETWORK** 18

Figure 14. EPPN website – main page

PRODINTEC (as WP10 Leader) has monitored the EPPN content to check the existing information of ReSiSTant project. Hence, Figure 15 shows the existing information of ReSiSTant pilot lines. The content was not provided by PRODINTEC.

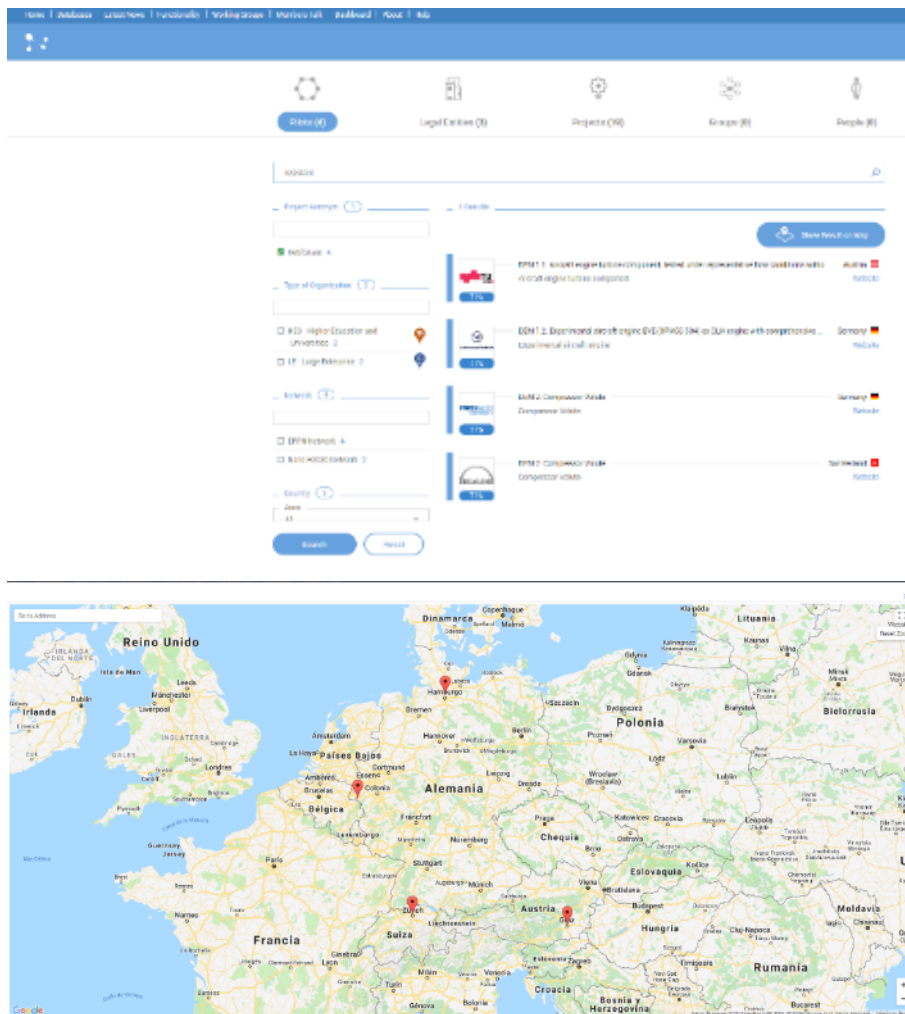
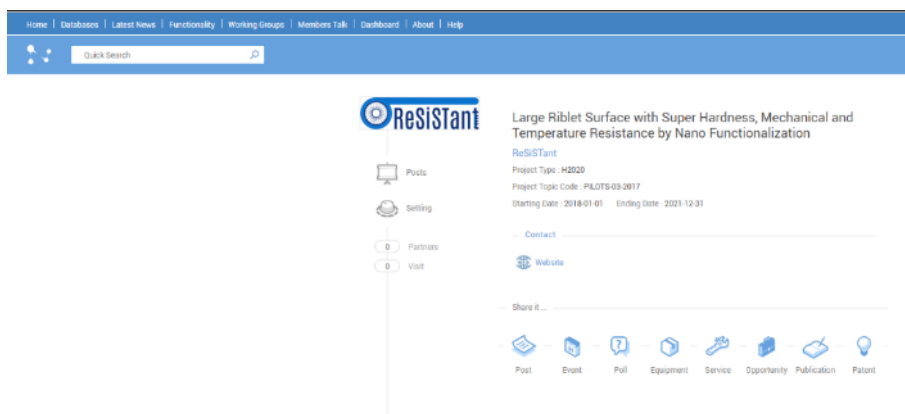



Figure 15. ReSiSTant pilot lines shown on EPPN

Likewise, there is also information about ReSiSTant project as shown on Figure 16.



[Home](#) | [Databases](#) | [Latest News](#) | [Functionality](#) | [Working Groups](#) | [Members Talk](#) | [Dashboard](#) | [About](#) | [Help](#)



10 Partners

64 Visit


### Large Riblet Surface with Super Hardness, Mechanical and Temperature Resistance by Nano Functionalization


**ReSiSTant**

Project Type: H2020

Project Topic Code: PHL075-03-2017

Starting Date: 2018-01-01    Ending Date: 2021-12-31


TRL Start Target: 

TRL End Target: 

Participant No.: 10    Countries No.: 5

Pilot Lines No.: 4

[Contact](#)

 [Website](#)

"ReSiSTant" targets the optimization of two industrial pilot lines by using micro- and nanostructured surfaces for drag reduction. The objectives are to implement new developed surfaces into 1) Aircraft Turbopump Engines and 2) Industrial Compressors. Positive effects by usage of such surface could give benefits in terms of efficiency, CO2 reduction and noise emission and further on a positive economical and ecological impact. To enable the usage of such micro- and nanostructures, special development on the surface material for better durability in rough conditions has to be done. It is planned to do nano-functionalization, like implementing nanostructures and nanoparticles for better resistance in rough conditions. Riblets basically consist of tiny circumferential grooved surfaces which reduce the drag in the turbulent boundary layer of up to 8%. Surface modifications such as riblets are the most promising technology that could be applied without additional external energy or additional amount of oil.

Figure 16. ReSiSTant project information as shown on EPPN

### 3 Onsite activities

This section collects all onsite activities carried out within and outside the consortium. Next a summary of each type:

- **Internal meetings:** it refers to meetings between project partners. Table 2 details the complete list of such meetings.

Table 2. ReSiSTant internal meetings

#	Date	Venue	Title of Meeting	Partners
1	24 <sup>th</sup> - 25 <sup>th</sup> January 2018	Graz (Austria)	Kick-Off Meeting	ALL
2	23 <sup>rd</sup> April 2018	Online	Follow-up Meeting	WP Leaders
3	8 <sup>th</sup> February 2018	Hamburg (Germany)	DEM1 Definition Meeting	LTH, IFAM, NCT
4	February 2018	TelCo	Demonstrator Requirements	RWTH, IFAM
5	22 <sup>nd</sup> February 2018	TelCo	Demonstrator Requirements	TUG, IFAM
6	June 2018	Telco	Coating formulations	NCT, IFAM
7	4 <sup>th</sup> -5 <sup>th</sup> July 2018	Bremen (Germany)	2 <sup>nd</sup> Progress and General Board Meeting	ALL
8	8 <sup>th</sup> October 2018	Online	Follow-up Meeting	ALL

- **Other meetings:** it refers to other types of meetings where project partners have presented ReSiSTant project. Table 3 includes the complete list of such meetings from month 1 to month 12.

Table 3. Other ReSiSTant meetings

#	Date	Venue	Title	Organizers	#Attendees	Content
1	January 2018	Los Angeles (USA)	Riblet Surfaces and Their Usage in Aviation - New Insights and Latest Applications	BST	60	BST presented the main project idea among other issues on BST session.
2	13th February 2018	Bremen	Use of Raw materials from one supplier	IFAM	4	Discussion about Raw material resources for DEM 1

- **Oral communications:** it includes oral communications of ReSiSTant project. The complete list can be found on Table 4.

Table 4. ReSiSTant Oral Communications

#	Reference	Author	Status	Url	Description
1	AeroDef Manufacturing	Andreas Flanschger (CEO BST)	Done	[33]	Title: Riblet Surfaces and Their Usage in Aviation: New Insights and Latest Applications. Presentation of project and goals. Date: 28 <sup>th</sup> March 2018.
2	World Gas Conference	Roberto Cafagna (CEO NCT)	Done	[34] [35]	During Nanto Cleantech presentation at WGC 2018, Mr. Cafagna talked about ReSiSTant project Date: 28 <sup>th</sup> June 2018.
3	Air Expo Munich	Peter Leitl (CTO BST)	Done	[36]	Speaker. Date: 20 <sup>th</sup> – 22 <sup>nd</sup> November 2018
4	Demo 2 meeting in Brazil	Andreas Flanschger (CEO BST)	Done	NA	November 2018 (BST). Discussion of customer needs (Petrobras)
5	NANO.IL.2018 - Israel	Roberto Cafagna (CEO NCT)	Sent	[37]	NCT delivered a presentation at NANO.IL.2018 in Israel, where NCT CEO Roberto Cafagna has described the company and its technologies. The event has been also an opportunity to talk about ReSiSTant project. Date: 8 <sup>th</sup> – 12 <sup>th</sup> October 2018
6	European Future Dialog	Yvonne Kowalik (IFAM)	Done	[38]	IFAM: Current research projects and possible cooperation projects. Short elevator pitch and poster. Date: 22 <sup>nd</sup> – 23 <sup>rd</sup> November 2018.

Next, some images of project oral communications, as shown on Figure 17.

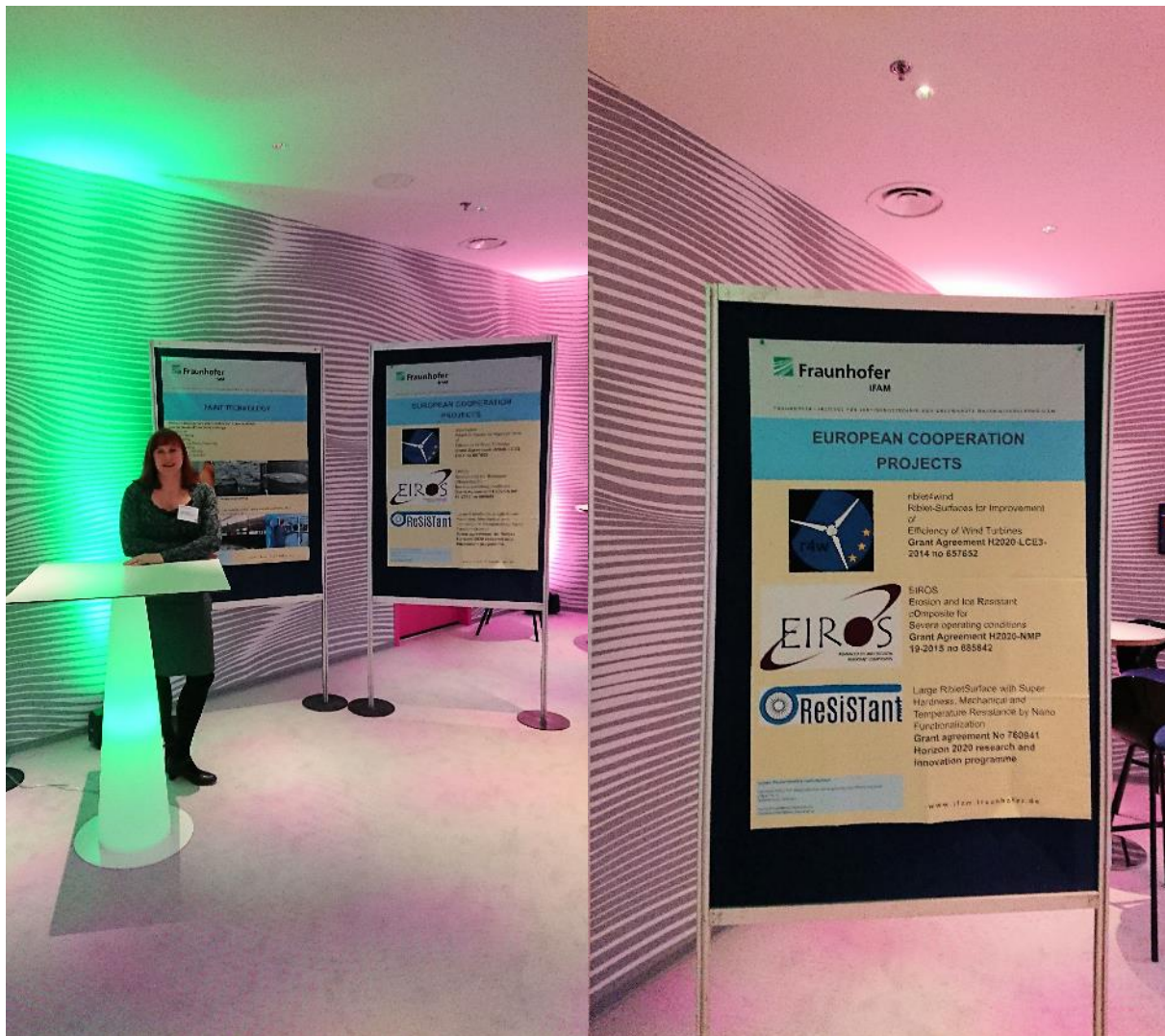


Figure 17. IFAM and ReSiSTant at European Future Dialogue

- **Attendance to fairs and others:** it includes the attendance to fairs and others where ReSiSTant partners presented the project.

Table 5. Attendance to fairs and events

#	Exhibit	Date	Venue	Type of Audience	Organizer	Description
1	Global Robot Expo	18-20 April 2018	Madrid (Spain)	Industry / Scientific	Global Robot Expo S.L.	PRODINTEC had a stand (166) where ReSiSTant flyer was included and project presented. [39]
2	European Coatings Show 2019	19-21 March 2019	Nürnberg (Germany)	Industry	Vincentz Network	IFAM had a booth, ReSiSTant flyer and (if applicable) sample were presented.
3	Bienal Máquina Herramienta	28May - 1 June 2018	Bilbao (Spain)	Industry	BIEMH	PRODINTEC had a stand (C48) where ReSiSTant flyer was included and project presented. [40]



Next some images showing some examples of ReSiSTant in fairs and other events.



Figure 18. PRODINTEC and ReSiSTant at Global Robot Expo



## 4 Impact

This section includes an overview of the achieved values related to ReSiSTant Key Performance Indicators. Such values can be found on Table 6.

Table 6. ReSiSTant dissemination and communication Key Performance Indicators

KPI ID	KPI Title	Value (M1- M12*)	Target value (Accumulative values)
			M12
1	Web visits	<ul style="list-style-type: none"> <li>• 5810 total</li> <li>• 5243 excluding member area</li> <li>• 480 users</li> <li>• Average visit time: 5' 38"</li> </ul> Total: 5243 visits	2.000
2	(Electronic) Material downloads / distribution (website outcomes section)	<ul style="list-style-type: none"> <li>• Flyer: 61</li> <li>• D1.3 data management Plan: 36</li> <li>• 1<sup>st</sup> Press release: 11</li> <li>• 1<sup>st</sup> e-newsletter: 13</li> <li>• 2<sup>nd</sup> e-newsletter: 4</li> </ul> Total: 125	20
3	Brochure / Leaflet distribution	<ul style="list-style-type: none"> <li>• ~200-&gt; visits to PROD stand in GREXpo + BIEH + others</li> <li>• 61 -&gt; electronic downloads</li> </ul> Total : ~260	250
4	Project e-newsletters downloads / distribution	<ul style="list-style-type: none"> <li>• 1st eNewsletter opened by 27 + downloaded from website by 13</li> <li>• 2<sup>nd</sup> eNewsletter opened by 32 + downloaded from website by 4</li> <li>• 2 new subscribers</li> </ul> Total: 76	15
5	Published press releases	<ul style="list-style-type: none"> <li>• 1st press release (September 2018)</li> <li>• Electronic downloads: 11</li> <li>• Sent to key media.</li> <li>• Published by 1 regional newspaper (Spain).</li> </ul> Total: 1	2

\* Values until start M11

## 5 Conclusions

This document collects all the activities which were detailed on the project dissemination strategy as part of dissemination and communication tasks related to the project. The monitoring of the activities was based on several Key Performance Indicators whose values for this period are collected on Table 6. In general terms, the project impact is even higher than expected as shown on such table.

Regularly, these activities were monitored and some improvements had to be performed in order to boost such impact when some weaknesses were discovered.

- **Newsletter tag:** due to the change of regulations on privacy data and its implementation in May 2018, a newsletter tag to collect contact lists for sending the e-newsletter. This was a change of initial website design.
- **New sections on 2<sup>nd</sup> e-newsletter:** despite the newsletter tag, there is a low number of subscribers out of the consortium. This is the reason why the second newsletter included a section related to “how to subscribe”.
- **Outcomes section:** this section was initially designed to share public deliverables. However, in order to increase project impact, other project related documents (e.g. e-newsletters or press releases) can also be found on this section.
- **CORDIS and project information:** at the beginning of the project, ReSiSTant project had some problems to be present in CORDIS Once project was included on CORDIS, the web positioning improved notably.
- **Project wide spreading from partners:** ReSiSTant partners have also shared the project information and website through their corporate website. PRODINTEC has also included information of the project within its regular newsletter (July 2018). These activities have also helped to increase project impact.
- **Social media sharing and origin of website access:** additionally, the project information has been shared through Social Media to increase the project web impact (Figure 19). However, an analysis of the type of website accesses has been performed: 1. Access through social media is the lowest one; 2. Referral access is the next one; 3. Organic search (from search engines earned, not paid) represents 8.6%. This is particularly important if the web is well positioned on such engines; 4. The first type of access origin is direct (any traffic where the referrer or source is unknown). The problem for direct access is that cannot be controlled and it is complicated to obtain more details about where it comes from. Some possibilities for direct access are: people who enter our URL into their browser or find it via a bookmark, emails from particular email clients, mobile traffic, Secure (https) to non-secure sites (http), etc.

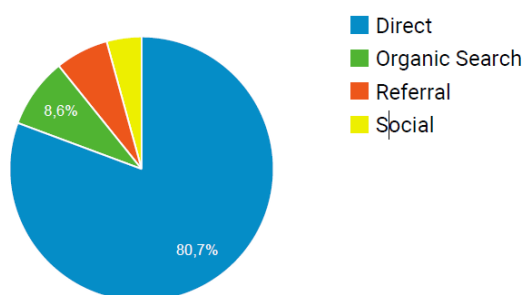


Figure 19. ReSiSTant website analytics – Month M1 to M12\* (until start M11)



The public website was fully operational since May 2018 and since then, the website impact has been enormous (e.g. website visits are more than the double of target value). Now, it is well positioned in Google as “resistant project” are key words and project website is shown.

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