



# PRESS RELEASE

# Restoration and conservation of 20th-century concrete monuments - success for EU project *InnovaConcrete* with contribution from Warrant Hub - Tinexta Group

# Accompanied by a public awareness raising campaign

**Correggio (RE), 24 March 2022 - Warrant Hub** - A leading firm in consulting for businesses on incentives and support for innovation and development projects, **Tinexta Group** was one of the key figures in <u>InnovaConcrete</u>, a European project in which the company was involved through its Brussels-based subsidiary beWarrant.

The core objective of InnovaConcrete - which began in January 2018 and has just finished - was to develop innovative products for the restoration and conservation of twentieth-century monuments made of concrete. However, the activities also focused on raising awareness among the community about the importance of protecting these significant items of cultural heritage.

The in situ experiments conducted as part of the international project also involved two Italian monuments, namely the Palazzetto dello Sport sports stadium by Pier Luigi Nervi (Rome) and the Monumento ai Caduti war memorial located in Torricella Peligna (Chieti). Outside Italy, they involved two projects in Poland, i.e. the Centenary Hall in Wroclaw and the Warsaw Central Railway Station, two in Spain, i.e. Praise of the Horizon sculpture in Gijon and the Eduardo Torroja Institute of Construction Sciences in Madrid, as well as the Kaunas Fortress in Lithuania.

# The project

With over €6.8 million funding from the European Union under the Horizon 2020 programme, InnovaConcrete was implemented by a consortium of 29 partners from 11 member countries, coordinated by the University of Cadiz. For Italy, the delegation included the Superintendence of Archaeology, Fine Arts, and Landscape for Abruzzo (a branch of the Italian Ministry of Culture), the National Research Council, and the Consortium for the Development of Large Interphase Systems, in addition to three companies, namely IONVAC, RINA Consulting, and Techedge. Plus, as mentioned, beWarrant for Warrant Hub, which was involved from the very beginning, at the project proposal drafting stage, as responsible for the socio-economic impact analysis as well as project dissemination and communication activities.

"Despite the particularly difficult period, the synergy between all the participants allowed InnovaConcrete to achieve significant results from both a scientific point of view - developing nanomaterials and innovative technologies for the conservation of concrete buildings - and in socio-cultural terms "- said Isella Vicini, Director of European Funding Development, at Warrant Hub - Tinexta Group. "Social impacts are a fundamental aspect of European projects and will be even more so in the Horizon Europe programme, and with our social engagement work within





InnovaConcrete we have certainly hit the target. We are proud to have contributed to the success of such a consequential initiative".

# **Scientific results**

As part of the project, multifunctional materials and techniques were used that incorporate inorganic nanotubes, bio-enzymes that enable concrete to self-regenerate, and atmospheric plasma technologies. More specifically, the project led to the development of innovative products capable of producing CSH, i.e. Calcium Silicates Hydrates, which is responsible for the engineering properties of concrete, and has brought significant improvements in terms of water repellence of surfaces and corrosion resistance of metal reinforcement components. What is more, specific new findings have been developed for crack repair, surface reinforcement, and to address delamination problems.

The products, which delivered positive results, were applied to the chosen monuments, all of which differed in terms of composition, conservation condition, and environmental conditions. At each site, during the at least two-year monitoring period, the same parameters were measured, i.e. colour changes, water absorption, hardness, compactness, and corrosion.

The products' performance was also confirmed by comparative testing against other products available on the market.

The solutions developed will be made available on the market in the form of protective products designed not only for the preservation of the concrete items of cultural heritage, but also for civil engineering infrastructural facilities, buildings, and all kinds of concrete substrates.

# Awareness-raising initiatives and social results

BeWarrant conducted various activities - in association with partners such as ICOMOS, DOCOMOMO, the Italian Ministry of Culture, and Techedge - to raise public awareness about the value of 20th-century concrete monuments as part of our collective heritage. These included: the production of <u>3D virtual tours</u> exploring five of the monuments involved; the creation of a <u>website</u> dedicated to the selection of 100 exceptional examples of 20th-century concrete architecture and engineering in the European Union; the promotion of communication not only globally but also locally: in Torricella Peligna, in particular, beWarrant and the Ministry of Culture carried out various awareness-raising activities that involved local institutions and citizens and contributed to the recovery of accounts and documents of historical importance as well as enhancement of the area to encourage tourism.

In this way, the initiative has increased the awareness of the local residents about how European funds for research projects translate into concrete actions which are also useful for small communities - which are not often involved in innovation processes - making them feel part of the European Union.

The opinions of members of the older and younger generations of Torricella Peligna - collected to investigate the impact of the project - resulted in the creation of <u>a complete report</u> by the Ministry of Culture and beWarrant.





#### Warrant Hub S.p.A.

Founded in 1995 by Fiorenzo Bellelli, Warrant Hub is a leading name in concessional finance and consulting services for SMEs and large businesses. In addition to the head office in Correggio (RE), Warrant Hub has branches located in: Milan, Piossasco (Turin), Casalecchio di Reno (Bologna), Rome, and Naples. It joined Tinexta Group in November 2017, in the innovation and marketing services business unit, and has over 300 professionals on its books, as well as more than 7000 client companies nationwide. Warrant Hub offers advice on the following areas to companies in all industries: Concessional finance (regional, national; automatic incentives; NRRP), European funding (through the European Funding Development, Warrant Hub supports companies within the European Framework Program in Research and Innovation - Horizon Europe), corporate finance, training (consulting and finance services to support company training), sustainability (consulting and finance services to assist companies with their ecological transition), energy ("110% Superbonus" subsidy for work to render buildings more energy-efficient - energy diagnoses - energy subsidies), as well as innovation, digital transformation, and technology transfer (through the subsidiary "Warrant Innovation Lab S.r.l "). In 2020, Warrant Hub also acquired a 60% share in PrivacyLab s.r.l., leading name in the sale of licences, consulting, and training on GDPR compliance, and created the subsidiary Trix S.r.l, the exclusive owner of the first cloud platform with the ability to perform checks to establish technological innovation levels in patents.

Warrant Hub also boasts a growing presence abroad, where it operates in the European financing area through the companies "beWarrant" (Belgium), Euroquality SAS (France), Europroject OOD (Bulgaria), and Evalue Innovation SL (Spain), the last of which is also extremely active in the field of concessional finance.

# TINEXTA S.p.A.

Tinexta, listed on the STAR segment of the Milan Stock Exchange, reported the following Consolidated Results as at 31 December 2021: Revenues of € 375.4 million, EBITDA of € 93.0 million and Net Profit of € 39.6 million. Tinexta Group is one of Italy's leading operators in its four business areas: Digital Trust, Cyber Security, Credit Information & Management, Innovation & Marketing Services. The Digital Trust Business Unit provides, through the companies InfoCert S.p.A., Visura S.p.A., Sixtema S.p.A. and the Spanish company Camerfirma S.A., products and services for digitisation, digital signature, digital identity, customer onboarding, electronic invoicing and certified e-mail (PEC) for large companies, banks, insurance and financial companies, SMEs, associations and professionals. The Cyber Security Business Unit operates through the companies Yoroi, Swascan and Corvallis and constitutes one of the national poles in the research and provision of the most advanced solutions for data protection and security. In the Credit Information & Management Business Unit, Innolva S.p.A. and its subsidiaries offer services to support decision-making processes (Chamber of Commerce and real estate information, aggregated reports, synthetic ratings, decision-making models, credit assessment and recovery) while RE Valuta offers real estate services (appraisals and evaluations). In the Innovation & Marketing Services Business Unit, Warrant Hub S.p.A. is a leader in consultancy in grants, loans





and tax relief as well as industrial innovation, while Co.Mark S.p.A. provides Temporary Export Management consultancy to SMEs to support them in their commercial expansion. As at 31 December 2021, the Group had 2,393 employees.

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