



THE CIVITAS INITIATIVE IS CO-FUNDED BY THE EUROPEAN UNION

The Handshake way

THE INSIDE STORY OF THE COOLEST CROSS-CITY URBAN CYCLING PROJECT

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The Handshake way

This is the story of 13 ambitious cities and 6 expert organisations who took on the sustainable mobility challenge starting from urban cycling.



5 years of transnational cooperation on urban cycling practices, supercharged by 50 years of knowledge! Drawing on five decades of experience collected by cycling front-runners like Amsterdam, Copenhagen and Munich, Handshake utilised an interwoven approach to hasten the adoption of sound cycling policy in 10 other cities.

01 WHY we did it The sustainable mobility challenge

The **climate crisis** casts a long and dark shadow. The call is both for immediate action and urgent longterm planning to reduce carbon emissions. Cities are growing fast and already face alarming levels of congestion, air pollution and a scarcity of public space. Cleaner mobility and transport solutions are key drivers for more sustainable cities. **Human-centred urban planning cannot be postponed.** Urban environments need actions to make road spaces safer and more friendly for everyone, especially vulnerable users.

Slow city movements and concepts of 15-minute cities are growing steadily but a community shift in approaching land redevelopment and road safety must be paramount. **Promoting the development of an urban cycling culture** and re-shaping cities to make them bike-friendly may help accelerate policy making and urban planning for **sustainable mobility goals.**

Handshake is a "means to an end". Influencing and supporting a **behavioural shift to choose cycling as a transport mode** may help reduce the dominance of personal motorized vehicles in urban settings and **drive urban regeneration**. Making cities more pleasant, liveable and economically prosperous for citizens.

Handshake's "problem"

• Many cities may not know where to begin to

improve the quality of cycling infrastructure and the promotion of sustainable transport communication. **Cycling is not a holist story everywhere** and the vast differences in city structures, geographical features and approaches makes it hard to come up a recipe book.

 Cultural resistances to cycling as a mode of urban transport, which also build on sceptical attitudes by shop-owners, commercial actors and business developers, also play a major role in the bigger picture. Plus, some cities have a partial and blurred knowledge of their own cycling culture and needs. Innovation may not have reached their urban planning choices yet.

Handshake's "solution"

- The good news is that other cities have already built a strong cycling culture and have collected a vast experience in integrating bicycles into daily urban texture.
- All this state-of-art knowledge, both in terms of mobility culture theories (including approaches to awareness campaigns for citizens) and practical solutions (innovation in areas such as intelligent transport systems, bike sharing, traffic modelling, bike parking, socio-economic assessment and governance and decision-making) can inspire and guide other cities who wish to embark on a similar journey.

02 WHO did it

At the heart of the Handshake project are 13 cities (Amsterdam, Copenhagen, Munich, Bordeaux, Bruges, Cadiz, Dublin, Helsinki, Krakow, Manchester, Riga, Rome and Turin) who want to improve governance and draft informed and innovative policies for urban planning.

The Mobility and Cycling Experts

Local and regional mobility/environmental/energy officers and urban planners are supported in the Handshake experience by "technical" partners and experts. These range from consultancies devoted to strategic decision making (feasibility studies, etc.), to sustainable urban mobility planning networks.From research institutes with a multidisciplinary approach in analysing causes and effects of urban cycling, to



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CIVITAS

Handshake



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ISINNOVA is an independent multidisciplinary research institute delivering strategic and innovative solutions to complex challenges. Always on a mission to inspire well-informed transitions towards sustainable futures. ISINNOVA's international and interdisciplinary think-tank team includes experienced researchers, skilled project managers, innovation experts and communication strategists. From the heart of Rome to the heart of Europe, ISINNOVA has taken part, both as a leader and as a partner, in over 100 research and innovation projects funded by the European Commission. The rich and solid international network built over the years is a major asset to the company's global reach.

02 WHO did it Meet the Handshakers

Handshake facilitates a mentoring process in which groups of like-minded cities with similar needs work together with a cycling capital city. Each cycling capital leads a group of cities to accelerate urban cycling progress.

AMSTERDAM

has first-class expertise in a wide range of cycling solutions. Her aim is to share knowledge and good practices with other Handshake cities.

BORDEAUX

is pursuing the full range of cycling measures available. Anging from refining its design standards and developing its cycling facilities to improving its monitoring systems.

BRUGES

wants to take its cycling network to the next level by tackling its weak links located near the historical city centre.

TURIN

wants to move beyond caroriented mobility, creating a better, cleaner, safer and more friendly urban environment to boost cycling.

ROME

has much unfulfilled potential when it comes to active mobility. Cycling has a crucial role to play in reducing congestion and improving the quality of life.

DUBLIN

wants to improve cycling facilities by increasing the number of bicycle parking spots and better accounting for cyclists at traffic signals.

COPENHAGEN

Cadiz

Dublin

Mancheste

Bordeaux

Bruges

is always exploring ways to be one of the best cities for cyclists. She wants to pass that knowledge on to other Handshake cities.

GREATER MANCHESTER

has a vision to create the most comprehensive and interconnected walking and cycling network in the UK.

HELSINKI

wants to make the bicycle an easy, convenient, attractive, and equal part of the city's transport equation.

RIGA

aspires to develop everyday cycling as a mobile, environment-friendly and healthy means of transport.

MUNICH

Helsinki

Riga

Krakow

is always looking to move forward with cycling and will show the way to other Handshake cities.

CADIZ

wants to become a more sustainable city by creating a network of bike lanes that provide safe, fast and efficient mobility.

KRAKOW

wishes to expand the role of the bicycle from recreational to everyday transportation.

03 HOW (well) we did it The Handshake approach to knowledge brokerage is network building

Handshake is all about **learning from the best and passing knowledge on!** There is a lot of theoretical and experience-related urban cycling knowledge out there. Someone needs to connect the dots and facilitate the flow of this knowledge in a **formal but friendly international setting** and make sure the benefits generated have a long-lasting echo.

To expose future cycling capitals to the extensive body of knowledge on existing cycling policies and innovative infrastructural solutions Handshake has set up a smooth and on-going transfer (and exchange) network. A **fast-track** through which knowledge, lessons learnt and coping strategies belonging to 3 "leader" cities **(cycling capitals)** are shared and passed on to 10 "follower" cities **(future cycling capitals)** aspiring to achieve a transition to an active two-wheel mobility.

Handshake made this happen by enabling a mentorship programme in which bike expert cities connect and share, in a formal and organised way, all the best-practices they have collected, along with the challenges faced and the strategies tested.

Blended Mentor-Mentee model

Part of this **contamination of good cycling practices** involves mentoring and supporting "follower" cities in promoting sustainable mobility through local investments in bike-friendly urban planning and infrastructure. Advice on how to raise awareness on the socio-economic benefits of moving away from car-centred cities and mentalities, to embrace ecological transition in transport choices, is also shared.

Although cycling capitals obviously have a more advanced cycling scene in place, the 5-year continuous exchange has been a **two-way street** from which both mentors and mentees have benefitted.

Inspirational activities

One of the pillars of the mentoring process is for the cycling capitals to provide first-hand inspiration to the group of cities they are "responsible" for. On site visits involving city decision makers and cycling adovacates are a key inspirational mode. These **immersive experiences** are the beating heart of Handshake's innovative approach to knowledge sharing!



















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03 HOW (well) we did it The Handhsake way

Our Tool Box

Handshake rolled out and applied a variety of approaches and methods to facilitate urban sustainable mobility impacts, provide community engagement and expedite key urban transformation concepts.

Interwoven **collaborative tools and processes** were developed to aid:

- Cooperation between cities;
- transferal of cycling solutions and innovative business models;
- C transition arena management;
- Omonitoring and assessment of transferred solutions;
- detection of cultural and political drivers able to facilitate and/ or hamper changes;
- O identification of critical learning areas to be addressed.





Mentoring

Future cycling capitals have a chance to be supported and counselled into finding the best cycling-oriented solutions for their city by communicating directly with actors who have success stories to share, as well as challenges to warn about.



Twinning

Cycling capitals also directly benefit from Handshake as they are able to **share highquality peer knowledge** and **best practices.** A chance to find further motivation to strive for more progress in their own already advanced sustainable mobility policies and infrastructure.



Social Cost-Benefit Analysis applied to cycling

To track, understand and direct investments in cycling infrastructure, notions of **Bikenomics** have been presented. An analysis of the socio-economic impact and return of choosing cycling over cars plays a major role in developing correct indicators to judge, quantify and improve investment decisions. Also based on **return in investments for cycling infrastructure** implementation and **monetization of social-well being** in bike-friendly urban environments.

50

Immersive Events

Training and learning about sustainable mobility planning is far more effective if you can get it under your skin through a **live immersion** in local success scenarios. This includes travel and hands-on bike rides for a **sensory experience** of cycling infrastructure.



Transition Management

To make urban change long-lasting and instrumental for policy implementation it is a good idea for a transitional team to keep evaluating objectives and support forward planning. A constant review of city design is useful. As is a regular apprisal of socio-cultural challenges to foster a permanent shift to active mobility through community engagement.



Monitoring and Evaluation

When conducting a social cost-benefit analysis, tracking traffic flow or evaluating citizens' perceptions of cycling safety, modelling and assessment tools will **increase the quality and relevance of action plans**. A specific **self-assessment tool (questionnaire)** has been developed to aid cities in understanding their own performance and proficiency in cycling. The Handshake way 50 years of cycling progress squeezed into 5



03 HOW (well) we did it Social cost-benefit analysis applied to cycling

BIKENOMICS IS A GOOD METHOD TO ANALYSE PLANNED MEASURES AND ARGUE FOR THEIR IMPLEMENTATION. IT IS VERY USEFUL THAT ASPECTS LIKE PUBLIC HEALTH, SAFETY AND QUALITY OF LIFE ARE CONSIDERED AND MONETIZED.

Munich

Cycling SCBA

Handshake cities had the chance to use first-

hand the innovative Bikenomics framing

methodology. They had a close look at how

to maximize the positive socio-economic and

environmental impacts of cycling solutions by

capturing quantitative and qualitative factors.

Bikenomics combines established welfare

analysis techniques - such as social cost-

benefit analysis and economic impact

assessments - with other qualitative and

guantitative methods.

Benefits of cycling compared

to low investment costs

BIKENOMICS HELPED US LOOK AT THE WHOLE PICTURE RATHER THAN JUST PART OF IT. WE HOPE WE WILL BE ABLE TO USE IT AS AN ADDITIONAL ARGUMENT. NOT JUST WITHIN OUR TEAMS, BUT FOR BEHAVIOURAL CHANGES ALTOGETHER.

Copenhagen

BIKENOMICS HELPED US SEE

CYCLING AS MORE THAN

A MEANS OF TRANSPORT.

THE CYCLING POLICY GOES BEYOND TRAFFIC

PLANNING. BIKENOMICS

INTANGIBLE GAINS MORE

TANGIBLE AND VISIBLE. IT

NEED OF A GOOD EX POST

MONITORING/EVALUATION.

ALSO REMINDED US OF THE

HELPED MAKE THE

Bruges

Riga

THAT THE ASSUMPTION OF CARS BEING THE MOST ECONOMICALLY EFFICIENT MODE OF TRANSPORT IS WRONG AND OUTDATED.

BIKENOMICS GOT US MEDIA ATTENTION IT HELPED SPREAD THE WORD ON HOW IMPROVING CYCLING CONDITIONS CAN IMPROVE THE SAFETY AND QUALITY OF OUR STREETS.

Helsinki

IT'S CRUCIAL TO INCLUDE CYCLING AS AN INTEGRAL PART OF DECISION MAKING AND DECISION MAKING TOOLS. **BIKENOMICS DOES JUST THAT!**

Amsterdam

BIKENOMICS HAS BEEN OF LIMITED VALUE TO US IN GREATER MANCHESTER. THIS IS AN AREA IN WHICH THE UK ALREADY HAS VERY WELL-DEVELOPED NATIONAL POLICY FRAMEWORKS.

Manchester

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FIEL GITT HIHH

BEING A COMPLETELY NEW TOOL BIKENOMICS INTRODUCED FOR US MANY INDICATORS THAT WE HAD NEVER BEFORE RELATED TO THE GOOD PERFORMANCE OF SUSTAINABLE MOBILITY PROJECTS.

Cadiz

THE TOPIC OF BIKENOMICS ITSELF HAS RECEIVED A LOT OF INTEREST FROM OUR MANAGEMENT. IT HAS THE POTENTIAL TO INFLUENCE FUTURE DECISIONS SUCH AS FUNDING OF CYCLING PROMOTION ACTIVITIES.

Krakow

THE TOOL WAS USED TO COMPLETE THE OVERVIEW AND MERITS OF THE PROJECT [CLOSURE OF PONT DE PIERRE BRIDGE TO CARS] BY PROVIDING EVIDENCE OF THE SOCIO-ECONOMIC BENEFITS. THIS ECONOMIC APPROACH HAS RECEIVED UNANIMOUSLY POSITIVE FEEDBACK AND IS A GOOD WAY TO PROMOTE CYCLING.

Bordeaux

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www.handshakecycling.eu

The Handshake way 50 years of cycling progress squeezed into 5

TRANSITION MANAGEMENT HIGHLIGHTED THE NEED FOR ENGAGEMENT AND PROMOTION TRANSITION MANAGEMENT HELPED US AND ASSISTED US WITH THE DEVELOPMENT ZOOM OUT AND FOCUS ON THE 'WHY' OF OF OUR CONNECTING COMMUNITIES STRATEGY, THE PROJECT. WE LEARNED THAT IT WOULD WHICH AIMS TO WORK WITH COMMUNITIES BE A MISTAKE TO FIND THE RIGHT ANSWERS TO INCREASE WALKING AND CYCLING TO THE WRONG QUESTIONS. FINDING THE THROUGHOUT THE CITY. RIGHT QUESTIONS IS CRUCIAL. Dublin Bruges BEFORE BEING JEOPARDIZED BY THE HIGH TRANSITION MANAGEMENT HAS BEEN TURNOVER OF THE TEAMS, TRANSITION INSTRUMENTAL TO INSPIRE AND MANAGEMENT HELPED US FOCUS ON THE IMPLEMENT PILOT EXPERIMENTS HAVING QUALITY OF OUR COMMUNICATION BETWEEN THE LONG-TERM TARGET OF SPEEDING UP TEAMS. OFTEN IT IS A MATTER OF WORKING STREET RE-DISTRIBUTION TO IMPROVE THE SEPARATELY TOWARD THE SAME GOAL. QUALITY OF PUBLIC SPACE. Helsinki Riga **Transition Management** Handshake's inclusive **Transition Arena** Transition management allows the introduction of new

ideas and approaches to combat the inertia that often stops cities from changing their way of addressing problems.

Handshake developed a "transition arena" involving a group of people devoted to updating objectives and directing long-term planning and implementation of better cycling solutions. The idea being that such a transition arena is far more inclusive and engaged with the community than traditional transport planning procedures.

TURIN WAS INSPIRED BY THE TRANSITION ARENA AS A TOOL TO ENGAGE THE COMMUNITY IN THE DEBATE TO BECOME A MORE CYCLING-ORIENTED CITY. WE AIM TO SET UP A YEARLY TRANSITION ARENA TO DISCUSS FUTURE CYCLING SOLUTIONS.

Turin

03 HOW (well) we did it **The Transition Arena**

TRANSITION MANAGEMENT ENSURED THAT THE CYCLING SOLUTIONS SELECTED AT THE BEGINNING OF THE PROJECT WERE INTEGRATED INTO EVERY-DAY PROJECTS AND PRACTICES.

Manchester

TRANSITION MANAGEMENT WAS A KEY ELEMENT IN EXPLAINING THE COMPLEXITY OF ACTIVE MOBILITY MEASURES TO LOCAL DECISION MAKERS AND CITIZENS.

Rome

TRANSITION MANAGEMENT FORCED US TO VISUALISE THE DESIGN OF CADIZ AS A CYCLING CITY IN A HOLISTIC WAY, IN WHICH ALL POLITICAL LEVELS HAVE TO BE INVOLVED. THIS HAS HELPED US PLAN IN THE LONG TERM AND TAKE INTO ACCOUNT THE OPINION OF ALL STAKEHOLDERS.

Cadiz

03 HOW (well) we did it Diving into cycling



Immersive Events

Handshake's hands-on approach

Immersive events are a highly personal and sensorial form of **experiential learning** used by Handshake to positively disrupt traditional thinking, rapidly spread good ideas, and accelerate the ambition and motivation of city leaders.

ORGANISING A STUDY TOUR FOR TWO VERY DIFFERENT CITIES (CADIZ AND KRAKOW), WITH DIVERSE GEOGRAPHICAL, CULTURAL AND LINGUISTIC BACKGROUNDS, MAY BE A BLAND COMPROMISE. IT WAS SOMETIMES QUITE CHALLENGING, ESPECIALLY BECAUSE THE TWO CITIES HAD DIFFERENT DESIRED GOALS AND THEMATIC FOCUSES.

Munich

HOSTING AND FACILITATING THE MANY PARTICIPATING STAKEHOLDERS BROUGHT FORTH MULTIFACETED CHALLENGES IN TERMS OF LOGISTICS AND CONSIDERATIONS.

Copenhagen ⁽

HOSTING THE IST HAS BEEN A TRULY REWARDING EXPERIENCE BUT THE ORGANIZATIONAL ASPECTS WERE DEMANDING: THE DEVIL IS IN THE DETAILS!

Amsterdam

TIPS for successful Immersive events

→ anchor the event to a well-defined factor/issue/ topic;

→ invest energy in effective team building through online preparatory meetings, where organizers get to know each other and cultivate trust;

→ select the right people for the "job" – find "influencers" in various leadership roles (in and out of cycling), who have tactical thinking, understanding of power dynamics and relationships, and are political savvy;

→ balance your agenda - pacing should be rigorous, but not physically and mentally exhausting. It should be flexible and invite spontaneous discovery and exploration, but also be strategically focused;

→ **select venues accurately**, including hotels and restaurants, keeping in mind proximity, convenience, authenticity and atmosphere;

→ make sure you **account for the language barrier**: use professional translators or internal volunteer resources;

→ share a detailed agenda before the event to make sure everyone is aware of the nature and spirit of the mission, and is familiar with sessions, dates and times;

→ during the event, **daily group debriefs** are fundamental as they give participants the chance to absorb inspiration and information to be transferred into practical actions. Having an outsider facilitator to stimulate unbiased discussion is a good idea.

THE 30/30/30 RULF

30%

30%

30%

FINDING THE BALANCE IN IMMERSIVE EVENTS

 +10%
unstructured discovery and exploration
workshops and

guided discussions

hands-on bike tours

direct knowledge sharing

Immersive

Symposia (IS):

missions which take place in

a Future Cycling Capital with a

visiting delegation of experts from

the mentoring Cycling Capital offering

inspiration, suggestions and training

Immersive **Study Tours (IST):**

missions in which a delegation of influencers from Future Cycling Capitals (mentees) travel to a host Cycling Capital (mentor). A series of pre-identified target themes are approached, based on the tailored needs of the Future Cycling Capitals.

Handshake's immersive experiences

influential people, including our deputy mayor, our chief members of our chamber opening experience for all.

Helsinki

To improve the immersive experiences, we could have built a bigger delegation of experts by inviting bicycle mayors and, perhaps, more advocates, French or foreign personalities who promote cycling as a daily mode of

Bordeaux

Riga

13

In organizing the IS Handshake's suggestions helped create a

stimulating, informal

setting to exchange ideas, instead of cramming the

programme with to-thepoint discussions. This

resulted in us achieving

dreaming of.

Bruges

more than we ever dared

The IST in Copenhagen was an amazing opportunity for specialists from Riga to see in practice innovative and safe bike infrastructure elements, that are used every day by happy bike riders in Copenhagen.

The IST in Amsterdam was a unique first-hand experience which gave participants a no-filter approach on how to properly develop successful active mobility measures, the required steps to achieve it and how to communicate those actions to the public.

Rome

Cadiz

The IST in Munich was unforgettable in every way. For five days we had the opportunity to fully immerse ourselves in Munich's routines, people, culture, architecture and everyday life. We returned home with a thousand new ideas and a lot of motivation to carry them out.

The IST week in Amsterdam was beyond our expectations. The cycling tours got us thinking about possible tools and policies that we could bring home with us. We are working to keep the energy from the IST going, by nurturing this network of local authorities, journalists, hotel managers, technicians who took part in this enriching event.

Turin

Munich's preparation of our IST was perfect (program, bike rides, organizational side, selection of presenters, etc.)! Some of our delegates were not speaking fluent language and therefore it was a brilliant idea to ask bilingual people form the municipality of Munich to take part in the whole event.

Krakow

It has been really interesting to discuss and experience the cycling infrastructure for ourselves. This allows cities to build relationships and identify technical areas to work on during the project, with the support of the cycling capital

Manchester

THE CONSTANT REVIEW OF WHAT HAS BEEN LEARNED, OR WHAT REMAINS TO BE LEARNED, HELPED US FOCUS ON WHAT IS IMPORTANT IN HELPED US FOCUS ON WHAT IS INFORTANT IN THE PROCESS, WHICH ARE, MOST OFTEN, THE KEYS TO SUSTAINABLE MOBILITY AND THE ELEMENTS NECESSARY TO BE ABLE TO JUDGE THEM.

Cadiz

SUBMITTING THE

AT EACH REPORTING

CYCLING SOLUTIONS

INCORPORATED THEM

INTO OUR WIDER ACTIVE

TRAVEL PROGRAMME AND

NAME OF TAXABLE THANK

AND HOW WE HAVE

STRATEGIES.

Manchester

STAGE WAS USEFUL TO

TECHNICAL MONITORING

KEEP TRACK OF OUR OWN

UNFORTUNATELY, MONITORING IS YET TO BE CONSIDERED A VALUABLE MEASURE TO RATE AN INTERVENTION.

Rome



03 HOW (well) we did it

Keeping on track

Krakow



Monitoring and evaluation **Keeping on track**

An updated and effective monitoring and evaluation scheme is an asset to any project, especially one with Handshake's ambitious goals and multi-level reach.

Periodically assessing the performance and evolution of cycling actions is **paramount** to favour a change in mobility and correct its trajectory, if necessary.

HANDSHAKE'S SYSTEMATIC APPROACH TO MONITORING AND **EVALUATION ROSE** AWARENESS IN OUR ADMINISTRATION AND HELPED US REFLECT ON THE TRANSPORTATION EVALUATING MEASURES CURRENTLY IN PLACE.

Munich

OUR TRADITION OF EVALUATING CYCLING THOUGH REGULAR MONITORING OF MEASURES AND SOLUTIONS IMPLEMENTED DATES BACK TO 1996. WE FIND THIS A GREAT STRATEGIC STRENGTH IN PLANNING AND SHAPING VISIONS OF COPENHAGEN, AS CONTINUOUS AND COMPARABLE MONITORING LEADS TO TRACING PATTERNS, TRENDS, AND IDENTIFYING THE MOST VALUABLE INTERVENTIONS.

Copenhagen

OUR ASSESSMENT OF PRE PROJECT SITUATION IS IMPROVING. WE ARE TRYING TO HAVE BETTER DATA GATHERING (FOR EXAMPLE CYCLIST COUNTING STATIONS) AND OTHER THINGS WE NEED TO HAVE BEFORE WE CHOOSE SOLUTIONS. HOWEVER, WE CURRENTLY LACK THE TOOLS AND MANPOWER TO PROPERLY ASSESS THE 'AFTER' EFFECTS.

AT THE MOMENT, ONLY MAJOR INFRASTRUCTURE PROJECTS (TRAMWAY, BUS) BENEFIT FROM PRE AND POST PROJECT STUDIES TO ASSESS THEIR IMPACTS (POSITIVE OR NEGATIVE). OUR GOAL IS TO EXTEND THIS KIND OF ASSESSMENT TO OUR CURRENT AND FUTURE PRO-CYCLING

ACTIONS AND PROJECTS.

Bordeaux

Riga

04 WHAT we did

Cycling innovations brought together into a supportive and novel transfer cycle

60+ cycling solutions

The Handshake "solutions" to understand, foster, plan, implement, track and assess urban cycling are over 60!

Assessment tools to evaluate a city's proficiency in cycling, design guidance documents for integrated mobility, implementation of traffic-calming measures,

action plans to find more space for bicycle parking, strategic junction planning... Handshake has stimulated debate, exchange and action on many aspects of urban cycling.

Find out more about Handshake's solutions here.

Several Handshake-powered solutions are already happening. Some are in progress. While other solutions generated through Handshake will see the light in the coming years.

Find out more about the **Handshake cities'** work in progress.

4 types of cycling solutions

Although solutions may have a multi-faceted or interconnected nature, each solution developed within Handshake seems to fit into one of four categories of activity that help drive the performance of successful cycling cities.



MODELLING AND ASSESSMENT

INFRASTRUCTURE AND SERVICES



Planning, regulations and standards

Shaping the cycling scene

To give cycling projects a fair chance to succeed some **back-stage prep** is essential. Activities include the preparation of cycling infrastructure network plans, raising the standards in design guidance documents, and linking with other modes of transport to improve transport system management.

Bordeaux designed guidelines for its future cycling network (ReVE), with the input and proofreading of the mentor, Amsterdam.

Bruges consolidated its vision for a new next-generation cycling network (FR30) to be more intuitive, connected and engaged with the city's rich urban and natural system. The adagio of this coherent cycling network 2.0. is *less speed, more city*.

The Junction challenge

Helsinki starred in an online Junction Design Challenge which involved all three cycling capitals. Amsterdam, Copenhagen and Munich all proposed a re-design of one of Helsinki's key intersections.



Upper left corner is the current state of Helsinki's Junction. Clockwise are expert suggestions, from Copenhagen, Amsterdam and Munich, for a bicycle-safe re-design.

Infrastructure and services

Building the cycling scene

Here is where Handshake has physically come to life. Solutions inspired by the project and implemented (or in progress) range from expanding the quality and proportion of space created for cycling, to improving the street environment. From catering for bicycle storage, to changing traffic lights to give cyclists easy and continuous journeys.

Rome set up an **ambitious transitory* cycle route plan of 150km.** Handshake informed the practical implementation (construction is in porgress)

and inspired the overall vision of the measure. *transitory is a key word here: it is not meant to be a synonym of "temporary pop-ups". The idea is to spark the transition to active mobility; the new bike lanes being the first step to a well-integrated network.





Riga constructed a **new ver**sion of its central Bruņinieku Street. It is now equipped with brand new bicycle lanes on both sides of the street. Various safety elements are present, such as

poles separating bicycle lanes from car traffic, bright blue paint to distinguish the cycling lanes and rubber stops.



Bike-friendly road signs

Manchester developed

a new Active Travel Wayfinding System involving a **new signage system for cycling and walking** routes. The project is based on the Dutch 'Knooppuntten' system researched and inspired by Handshake.



Handshake's success stories Handshake pills Building the cycling scene



- O Dublin has more than doubled cycle parking spaces in the city.
- Sordeaux closed its key bridge *Pont de Pierre* to cars. The main bridge connecting the city to the outer riverbanks is now reserved to public transport, pedestrians, cyclists, e-scooters, taxis and emergency vehicles.
- O Manchester launched the Bee Network cycling and walking infrastructure proposal. As well as a Cycle Hire Scheme, scoring a total of 10,406 miles cycled within the first four weeks.



Turin re-considered the design of junctions, urban furniture, and pedestrian paths and crossings placing them next to bicycle ones in various parts of the city.

Dublin opened a new dual, two-way pedestrian and cycling bridge over the Royal Canal on North Wall Quay. The bridge takes cyclists off the main carriageway, which they previously shared with cars, buses and heavy goods vehicles.

Modelling and assessment

Looking after the cycling scene

Handshake exposed cities to modelling and assessment tools which can **assist in directing cycling policies and solutions**. Cycling models and simulations can help a city gain the bigger picture of existing gaps in provision and point to cycling solutions could that could be integrated. Also, these tools have a **foresight potential** that may help predict demand and future cycling movement to avoid poor return from investments.

Techniques can be used before and after cycling schemes are implemented to make sure they contribute effectively towards a wide range of different objectives. **Handshake looks at the effectiveness of cycling solutions from many angles.** From the experiential analyses of cyclists' safety, to the modelling and measuring of how the transport system operates. A constant evaluation of the effectiveness of publicity to encourage cycling is always recommended.





Handshake's self-assessment tools

A specific performance and assessment tool has been developed by Handshake to aid cities in understanding their own performance and proficiency in cycling. A two-part survey module will shine some light on a city's present cycling scene, including future ambitions for cycling penetration and delivery of the desired cycling change.

Turin has set-up, during the course of the project, an **underground network of sensors** to monitor the city's five main bicycle axes. The data between January 2021 and January 2022 points to an overall +14% growth of active mobility (bicycles, kick-scooters) detected on those bike lanes that cross the city.

Copenhagen devotes a lot of time and resources into evaluating and monitoring the progress of cycling solutions and infrastructure. **Data is gathered from different sources** – ranging from internal traffic counts to larger-scale analyses coming from external consultants. This includes hard figures of the modal share, with number and length of cycling trips. But also data on citizen evaluation of cycling in Copenhagen and satisfaction rates on parking, maintenance, and public life in general.



Awareness and education

Engaging the cycling scene

What is the point of building a cycling heaven if nobody knows where the routes go? Or if people don't feel motivated or confident enought to try riding a bike in the first place?

Communication campaigns help blend practical knowledge with inspirational messages. Handshake supported the delivery of information to key audiences, including school children and their parents, those new to cycling and already existing bicycle riders looking for better and safer routes.

> Presentación lde y al Rector de la UCA programa "BiciCole" 21 de diciembre 13h. a 15h.

BIC[']COLE

IN

PARCHEGGIO

Cadiz identified possible communication improvements to boost the impact of its Bicicole programme devoted to training school children in using bicycles as a daily means of transport.

Beat the Bikelash

Turin took it upon herself to Beat the Bikelash present in the city and motivate people to embrace more sustainable transport alternatives. Joining forces with local associations and private organizations, Turin sponsored several **bike-awareness activities**, including bike pride parades and bike events tied to international events taking place in the city (Eurovision, International Book Fair).

> EUROVISION SONG CONTES

Krakow successfully implemented 4 series of free bike checks for local residents. An excellent example of taking care of cyclists' safety while promoting cycling. The checks will remain part of the city's offer after the end of the project.

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Awareness and education

Engaging the cycling scene

Munich engaged in **mobility education**. Various age-appropriate projects, from kindergarten to eighth grade, support and motivate children to move actively and raise their awareness of sustainable mobility.



Leveraging a cycling champion

Manchester's winning recipe for raising cycling awareness has been involving cycling champions to help promote active travel as an everyday



mode of transport. On top of reaching citizens, appointing former cycling champs as Active Travel Commissioners boosted political will and support around all aspects of active travel.

Chris Boardman was the city's first Cycling and Walking Commissioner (2017 – 2022), working directly with the mayor and the Transport Department to secure funding and help deliver cycling and walking related activities.

In May 2022, the torch passed on to Britain's

most successful Paralympian, **Dame Sarah Storey**, who is working specifically on promoting road safety and improving access to cycling for women and those with disabilities.



Dublin Meet **Donna Cooney**, Dublin's Bicycle Mayor and city councilor who takes care of the *Bicycle Heroes* program for children.

In Dublin, we need change; we need to see more people going about their daily activities on a bicycle, normalizing this mode of transportation for work, leisure, and school. I've being cycling all my life, and I am passionate about encouraging more women to cycle, as we currently make up only 1/5 of cyclists. I recognize and want my city to recognize the important role that cycling can have for healthy cities, healthy people, CO2 reduction, and air pollution mitigation.



Rome found *ex ante/ex post* photos of cycling measures very effective. Although these may not yet be fully adopted as a relevant communication tool, they are gaining a well-deserved popularity.

05 ALL we learnt Long live Handshake!

"It has become clear that our cycling-related communication and promotion needs new tools (leaflets), a redesign of the current website and an increased activity on social media (through our elected officials) to inform and promote new facilities and services."

Bordeaux



Clémence Burgué and Florent Coignac Bordeaux métropole "Through Handshake we identified critical gaps in existing policy, specifically in relation to transition management, through broad and varied community engagement methods."

Dublin



Deirdre Kelly and **Antonia Martin** City of Dublin



Dominic Smith Transport for Greater Manchester

"Engaging with different teams and departments across the organisation is central to ensure any inspiration and knowledge is inputted at the start of projects."

Manchester

The Handshake way 50 years of cycling progress squeezed into 5

05 ALL we learnt Long live Handshake!

"The focus should be on relations, not parts. Cycling tracks should not be designed as isolated traffic infrastructure. Linking planning with design, telling stories instead of explaining traffic solutions, monitoring people instead of traffic flows ... In short: making the shift from sustainable mobility (focusing on sustainable transport modes) towards an integrated city approach." "The key to unlocking future cycling solutions is finding what is referred to as the genius locus, the spirit of the place. Developing new cycling infrastructure should be like writing a new chapter in an existing book: it must be in line with the previous chapters (in the case of Bruges this means respecting the world heritage setting)."

Bruges



Bart Slabbinck City of Bruges



Bruges

Manolo Navarro City of Cádiz "Because of Cádiz's size (barely 13 km²) and due to the fact that it is not possible to extend the city, urban planning is very difficult. Therefore, in general, the construction of new infrastructures, including cycling ones, must involve the relocation or modification of existing spaces."

Cadiz

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05 ALL we learnt Long live Handshake!



Anna Donati, Fabrizio Benvenuti and Francesco lacorossi, City of Rome

"Planning and design aspects, along with

communication insights,

were the pillars of our learning areas in

Handshake.

"Handshake has exposed us to different strategies and approaches that we would like to replicate to accelerate a cultural transition. Among these are: nominating 'street managers' as moderators in city districts, to help discuss new interventions with city users involved in an area (shop owners, residents etc.), and sponsoring a gamification approach, through apps and challenges that inform and motivate people to cycle via credit/debit, reward/ fine systems."

Turin



Gloria Tarantino and **Giuseppe Chiantera** City of Turin



Rome

leva Pastare City of Riga "We have improved our attention to design aspects. Now we take the needs of cyclists and also all other micro mobility users into consideration more than ever and are doing our best to improve the new designs to create a better environment for all vulnerable street users."

Riga

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05 ALL we learnt Long live Handshake!



Raoul Teekamp, City of Amsterdam

"We feel it would be great to continue exchanging experiences with our fellow Cycling Capital colleagues in other cities. We foresee future meetings with traffic modeling experts, junction designers and behaviour specialists to continue the sparks triggered via Handshake."

Amsterdam

"The contacts with Munich allowed to draw inspiration for new activities, which were not only well received by the management team and the inhabitants, but will also be permanently inscribed in the city's cycling offer."

Krakow



Joanna Majdecka City of Krakow



Oskari Kaupinmäki City of Helsinki

> "Handshake helped us reflect on how stiff and hierarchic our regulatory system is. It has many benefits but it also has many flaws, which work as barriers to development. This is the struggle all cities have to go through and assess one way or another. In this regard, sharing experiences and peer-support at a Europen level has been mentally very inspiring."

> > Helsinki

S www.handshakecycling.eu



The Yin and Yang of urban cycling progress

Light and shadows are behind every process to progress. Handshake is no exception.

Along this 5-year ride we have encountered **factors that enabled cycling progress** and the writing of success stories as well as **setbacks and shortcomings** which have influenced the cycling planning practice and complicated the transferal of cycling solutions. Similarly to the ancient Chinese yin (black) and yang (white) principle, these **opposing forces have acted in Handshake in a complementary and interconnected way.**

Some key aspects (political, cultural and behavioural, capacity, legislative/regulatory) have been both challenges and forward drivers to cycling advancement and have equally shaped Handshake's success stories.



POLITICAL WILL AND COMMITMENT Establishment of active-mobility sensible governing parties

Managing the change of governing teams

The election of new political teams requires a vast re-organization of departments and priorities which may slow down, postpone and delay decision-making regarding projects "inherited" from previous political teams.

The new elected team (Green Party) is willing to develop cycling, reduce the space dedicated to cars, promote walking and thus represent change. **Bordeaux** The election of the Cycling and Walking Commissioner has been transformational in the allocation of substantial long term funding to cycling and walking for the first time.

Manchester

Krakow benefitted from a stable political course during the project. This allowed to keep a steady pace in terms of cycling promotion and advocacy. Krakow

Political boldness and commitment to sustainable mobility transitions

Although supporting the development of cycling, sometimes politicians find it difficult to make their ambitious wishes come true when confronted with technical difficulties. **Bordeaux**

Political support is needed for projects to gain some traction. This also goes hand in hand with courage to take a stand on something. **Munich**

Most politicians are quick to publicly back cycling in general but will lodge objections to specific schemes in their areas. **Dublin**



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"Cycling is for everyone, no matter where you live or even how old you are. It's a super easy way to cut your CO2 emissions and help fight against the climate crisis. Cycling is the best way to decarbonize transport in a way that can be accessible to all."

When carbon neutrality is high on the political agenda

10 out of the 100 cities chosen by the European Union's *Mission Cities* to become **climate neutral** (and smart) by 2030 are Handshake Cities! A round of applause for Amsterdam, Bordeaux, Copenhagen, Dublin, Helsinki, Krakow, Munich, Riga, Rome and Turin, 100% of the Handshake partner cities that had applied to the Mission Cities' call. Handshake has no doubt that the road to carbon-neutral cities must be a bicycle-friendly one.

> "Our carbon neutrality goal 2030 should work as an accelerator for future change". **Helsinki**



Frans Timmermans European Commission Executive Vice-President for the European Green Deal

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CAPACITY ASPECTS

Financial capacity Handshake's positive input

We have been able to increase our capacity to deliver cycling infrastructure massively during the course of the project. Roughly speaking, we are now delivering at about £40m of infrastructure per annum, whereas 5 years ago we were probably only at about 10% of this level.

Manchester

Investing in capacity also has its limits. The Department of Mobility (and generally speaking the City of Bruges) is relatively small, which is why joining forces in a European (but also regional) context is important, not only to move the figurative horizon but also to move towards that new horizon.

Bruges

Political change has positively impacted financial capacity: funds invested in the construction of bicycle infrastructure went from 1,18 million EUR in 2018 to 4,43 million EUR in 2021 and a planned 5,1million EUR for 2022.

Handshake provided personal and budgetrelated resources for cooperation and learning that would not otherwise have taken place – at least not formally and at such scale.

Copenhagen

Technical capacity

Improving quality and competence

Another difficulty encountered is the consideration of cycling when designing facilities. We noticed that the practice is not considered enough (sometimes not taken into account at all), and that designers and architects designing infrastructures/public spaces projects are not alway familiar with the technical recommendations required to enable pleasant and safe cycling (coating, colour, signage, lane widths, etc.).

Bordeaux

A different planning vision is needed. Something like: "would you let your loved one cycle on the infrastructure you have just planned?" **Rome**

Human capacity

The teams behind effective mobility management

It is not always possible to tackle these projects the way we would like to. For example by having a team focused only on bike mobility or by implementing new and better infrastructure in our city.

Cadiz

Human resources are still not at the level we would need. The work load of individual planners is high and some projects are late solely due to the action plan's implementation within the organisation and certain departments.

Helsinki

To a certain extent, financial scarcity is a myth. But lack of human resources is a major hinderance to effective mobility projects. We need a new and well-structured «Active Mobility office».

Rome

The lack of human resources such as, personnel, technical skills, as well the Public Administration's organization is evident. Offices involved in road design need a more integrated cooperation and dialogue. **Turin**

Handshake is mainly anchored to one team in Copenhagen (Strategic Cycle Planning Team), which sometimes makes it difficult to recruit people from other teams to participate. Expansion of time and resource capacities could take collaboration to the next level. **Copenhagen**

LEGISLATIVE/REGULATORY ASPECTS

Working around the framework

Finding a fast-track to plan, execute and transfer cycling change

Pioneering a new process often hits institutionalised walls and implies struggling with legislation, subsidy frameworks, etc. **Bruges**

We suffer a highly hierarchical and regulated planning system, which is slow to learn new ways of doing and thinking. This leads to weak commitment to the action plans' implementation within the organisation and certain departments. **Helsinki**

The differing legal/regulatory frameworks in different countries can challenge the transfer of practices from one nation to another.

Manchester

Administrations in different cities have different structures and time horizons for making things happen and people also have different communications styles. These cultural differences take time to adapt and homogenise, but the cross-city collaboration in Handshake has made it happen.

Copenhagen

Excessive bureaucracy and administration definitely prolong the implementation process and sometimes even cause its stagnation or permanent resignation from the idea of changes/ new measures.

Krakow

HEALTH EMERGENCY

CULTURAL & BEHAVIOURAL ASPECTS

Getting everyone on board

Resisting the (sustainable) transport revolution

There is a very established culture of car dependency within the UK which makes developing and promoting cycling challenging. **Manchester**

Getting civil society on board with active mobility is a musthave! Many residents in Turin are resistant to changes that focus on spaces and facilities dedicated to pedestrians and cyclists.

Turin

The important thing - in terms of a successful transport revolution - is to take all stakeholders along on the journey. In our communication measures, we attach great importance to not pointing the finger. We work with information, advice and motivation (through incentives, such as free loan of a bicycle trailer/cargo bike for young families and gamification, such as collecting points for climate-friendly travel). **Munich**

Despite growing general public support for climate friendly measures, each individual project tends to run into specific opposition from people who are inconvenienced by the project.

Dublin

The climate-sensible crowd is out there!

Citizen participation has also been fundamental! Thanks to the great reception that the different actions have had, and the increase in the number of cyclists in the city, we can consider our Handshake participation a great success for our city.

Cadiz

The understanding of the environment has changed (Fridays for Future) and sustainable mobility has thus become an important topic, of course also for politicians who use it for their election campaigns.

Munich

The many shades of Covid-19

Unprecedented cycling progress in unprecedented pandemic times

Although the health crisis has pushed some people to cycle, it has also slowed it down during confinement and through the development of practices such as teleworking, which reduce the number of trips. **Bordeaux**

The great sense of community that came with Covid-19 and brought people closer to daily cycling is now fading away. **Rome**

When Covid-19 broke out, the City of Turin had the chance to exploit large amounts of public resources coming from EU and the Ministry of Environment and direct them into "emergency" mobility measures. **Turin**

Cultural changes during Covid-19 have also enabled more ambitious changes which would not have been previously possible.

Dublin

06 Handshake in 8 themes Sit back, relax and enjoy the ride with the Handshake TV

In cooperation with partner cities, Velo Mondial produced a thematic video playlist named **Handshake in 8 themes**.

Each cycling theme is explored though short and sweet videos (<10 minutes). The heart of the thematic videos are interviews of Handshakers (some recorded while riding their bikes!) guiding through **on-the-road footage of cycling 'challenges' and 'solutions'** in their cities. Pictures, maps and infographics occasionally support and feed the narratives.

THEMES



Linking together cycling lane patches in a coherent network. Designing a network that allows for direct and short cycling journeys.

Keeping cycling network users safe. Making cycling journeys easy and pleasant for users.



Functionally integrating the cycling network into the surrounding built and natural infrastructure.



4

Developing communication and marketing for cycling. Enhancing society's attitudes towards cycling. Training users and society for cycling.

Leveraging a cycling champion. Lobbying and raising political awareness for cycling.

5



Embedding cycling in strategic urban planning. Fostering collaborative and integrated planning for cycling. Developing regulatory provisions fostering and prioritising cycling. Fostering cycling with supportive mobility and regulatory solutions.

Ensuring appropriate expertise in cycling policy. Ensuring adequate levels of funding for cycling.



Evaluating the success and failures of cycling policy.

Check out the full playlist _____ Handshake in 8 themes as part of HandshakeTV



SCAN TO WATCH THE VIDEOS



07 Thank You, Handshake A closing note from the Project Coordinator

International projects based on **blends of professional and personal collaboration** always go beyond what meets the eye. This Handbook tells stories that will hopefully be sources of inspiration for likeminded organisations and individuals. Going through these experiences the reader will likely draw ideas, sources, and contacts that may come in handy when trying to push forward similar endeavours.

Controlled explosion of potential

Something more transpired from Handshake, during nearly five long years of tight-knit togetherness, across many different countries and through the unprecedented complications ensuing from the outbreak of COVID-19. Perhaps the one most revealing lesson that Handshake has taught us, the whole lot of people that came together thanks to this project, is that **working as 'monads' in our own organisations, or even cities, is an outdated approach.** This single unit working mode is a cultural and organisational heritage that belongs to the past which must (and can) be overcome.

Vast literature delves into the need to break the urban 'silos'. To witness the vast potential that opens up when individuals, teams, and entire organisations reach out to others, unleashing synergies and efficiencies that are already there, albeit dormant.

In Handshake, more than in any other project we have been part of, and many of those we have met along the way, we were able to accomplish that kind of controlled explosion of potential.

Together is better

Handshakers managed to build a group, animated by the sheer desire to share ideas, ask questions, sometimes burning and difficult. Expose problems and frustrations, advise and motivate each other, pointing at possible solu-



tions or turning to other people who could support. It took time, of course. We worked with people hailing from very different backgrounds and personal attitudes. But what emerged with time was what we now call a **'broader, international band of colleagues'**. A professional crew that goes beyond cultural, administrative, organisational, and geographical boundaries. A team working together on a regular basis in time (monthly, weekly, or daily) and space (email, phone, video calling and, when possible, side by side).

There is no reason why cities should tackle problems and opportunities that are largely the same, irrespective of local circumstances, in isolation. **No one 'knows better'. We all know something.** Put that together and solutions come up faster, stronger and more efficient. Comfort and confirmation, motivation and determination, knowledge, and growth, both at theoretical and empirical level and at personal and professional level, that comes from multicultural collaboration is unparalleled.

The Mission continues...

Of course, much more can be done. We succeeded in engaging what we call the 'first liners', those representing cities internationally, those tasked with building knowledge partnerships and transferring value to the local practitioners, managers and technicians responsible for the actual concrete delivery of solutions on the field. The latter are traditionally more impervious to international cooperation, having to juggle daily priorities and pressures, language shortcomings, and traditionally defensive organisational attitudes that tend to label outside perspectives as threats.

Handshake was able to blur that divide, bringing teams of practitioners to really know each other. Its blended structure facilitated asking 'tekkie' questions, deep diving into minute technical aspects, and even taking part in international friendly contests to find the best solution for common urban problems. This offers a glimpse of hope. If we are to tackle the challenges our cities are facing, including the ambitious goal of reaching urban climate neutrality, one of the current key Missions of the European Union, we need to accelerate change. To do so, we need all aboard.

Thank y'all, Handshakers!

As proud coordinators of Handshake, these above has been the greatest rewards. When we first decided to bring this group together, we designed an inspirational trajectory hinged on an interlaced set of methodological components (see section *How (well) we did it*) which promised to reap benefits for the cities involved. We had direct or indirect experience with each of those building blocks, but **never had they been embraced and tested at such large European scale**, in so many diverse contexts. All cities accepted the challenge wholeheartedly and this has made everyone richer.

Mario Gualdi President and Lead Researcher at ISINNOVA mgualdi@isinnova.org





2021 (ex-post)

2030 (Projection)

The results exceeded our expectations. Not just in terms of changed mind-sets but also in respect to more classical repayments for communities involved. A close look at some of the headline results of Handshake tells us an interesting story.

Take the aggregated number of cyclists resulting from the effects of our flagship solutions in all 13 cities, which went up by 28% despite the backlash of COVID-19. The 2030 outlook, based on our expert trend analyses and projections, shows a particularly promising scenario, with cycling volumes that nearly double those recorded in 2018, year during

which Handshake started off. Sounds like a substantial contribution to the European carbon neutral Mission.



2021

2019

2018 (Base year)

Another revealing figure is that of the aggregated average distance travelled by cycling vs. by car during Handshake. Despite the substantial measurement distortions caused by COVID-19, our cities recorded sharply rising distances covered by cycling, with a twofold increase from 2018.





The Handshake experience was ripe of lessons, some more eye-opening than others. We are confident that all participants will use them to improve their capacity and hopefully make a difference. We expect that many will continue to play as a 'band' also in the coming years. ISINNOVA will surely continue to push cooperation forward, whether at an international or more local level, knowing that joining forces and sharing never goes wrong!

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ABOUT ISINNOVA

ISINNOVA is an independent multidisciplinary research institute delivering strategic and innovative solutions to complex challenges. Always on a mission to inspire well-informed transitions towards sustainable futures. ISINNOVA's international and interdisciplinary think-tank team includes experienced researchers, skilled project managers, innovation experts and communication strategists. From the heart of Rome to the heart of Europe, ISINNOVA has taken part, both as a leader and as a partner, in over 100 research and innovation projects funded by the European Commission. The rich and solid international network built over the years is a major asset to the company's global reach.

If you are interested in receiving additional information on Handshake or exploring future partnerships, visit us at

www.isinnova.org