

TKI 2022 – Call for proposals - Supply Chains for Society

Introduction

TKI Dinalog is the Knowledge and Innovation Partnership in which business, knowledge institutes and government work together in the innovation program of the Dutch Top Sector Logistics. This regards innovation through fundamental and applied research and knowledge transfer and valorisation of experiences and results. TKI-Dinalog, NWO, TNO collaborate to structurally improve the cooperation between commerce, knowledge institutes and government and stimulate research and innovation.

This call for proposals for research and innovation contributes to the implementation of the [action programme of the Topsector Logistics 2020-2023](#) (see www.topsectorlogistiek.nl) and the mission-driven Top Sector and Innovation Policy. This call is a call for proposals in the TKI PPP Funding ('PPS Toeslag') scheme of TKI Dinalog.

Top Sector Logistics

The Top Sector Logistics has detailed its ambition in a number of objectives and two target values for 2030. The Top Sector Logistics consists of the participants in the 'triple helix' of government, companies and knowledge institutions. Together they determine which activities are needed to realise the ambition while maintaining and strengthening an efficient mobility system and reducing the environmental impact. The Top Sector Logistics is not simply about transporting more goods, but about doing this smartly: more cargo with fewer kilometres and less CO2 emissions, more high-quality services, more cost savings.

Mission-driven Top Sector and Innovation Policy

The Netherlands is faced with grand societal challenges; for example, healthy ageing, affordable healthcare, optimal use of nature and resources, reduction of greenhouse gas emissions, affordable and sustainable energy, sufficient and healthy food, a secure country to live and work in and digital security. The mission-driven technology and innovation policy focus on four social themes:

1. Energy transition and sustainability;
2. Agriculture, water, food;
3. Health and healthcare;
4. Security.

A Knowledge & Innovation Agenda (KIA) has been drawn up for each of these grand societal challenges with specific missions. The innovative strength of the top sector to contribute to solving these challenges for the future; with knowledge, research and strong ecosystems. (For more information: [Factsheet+Dutch+Solutions+to+Grand+Challenges.pdf](#)). Collaboration between researchers, business, governments and societal partners is indispensable. Multidisciplinary and cross-sectoral collaboration in research and innovation is essential.

The challenges and missions adhere to the Sustainable Development Goals; seventeen goals to make the world a better place in 2030. They recognise that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. They also provide the direction for the grand challenges in the Netherlands. (more information: [THE 17 GOALS | Sustainable Development \(un.org\)](#)).

Call for proposals 'Supply chains for Society'

This call aims to contribute to the further development of logistics knowledge for tackling these grand challenges, in collaboration with relevant scientific disciplines, sectors and societal partners. Logistics and supply chain management research questions are relevant strategically (location, sustainability, energy transition), tactically (fleet size, modality configuration) and operationally (deployment). This requires the translation of fundamental logistics knowledge to specific characteristics of processes in the public domain. An important challenge is including multiple complex objectives that are difficult to quantify.

This call for proposals focuses on two of these grand societal challenges, namely 'health and healthcare' and 'security'. Within these themes, multidisciplinary (both scientific as societal) consortia are invited to submit proposals focused on 'supply chains for society', with knowledge development in the field of logistics and supply chain management. We call for proposals that holistically address the complexity of societal systems and processes by actively involving multiple stakeholders, in the direction of, but not limited to, below mentioned topics. Proposals should contribute to the earning power and above-mentioned grand societal challenges for the Netherlands.

1. Health and Healthcare

The Dutch population is ageing but all citizens want to live in good health with a high quality of life. Challenges include promoting the health of all citizens, increasing the participation in society of people with a chronic disease or lifelong disability, and improving the affordability and quality of care, for which accurate supply chain management is crucial. Important for this call is to conduct the research in the direct context of the healthcare system, as a sole logistics perspective is too narrow. The results should be embedded in the healthcare system, including personnel policy and financing, in line with the multidisciplinary character of the call for proposals. This topic relates to mission 2 of the KIA Health and Healthcare. Relevant logistics topics in this context are for example:

- Operations management for healthcare (patients, capacity of operating rooms and intensive care, purchasing and return of medical supplies and medicine).
- Business models for logistics processes in diagnostics, treatment and extramural care.
- 'Emergency response' of healthcare services and vaccination campaigns (ambulances, regional health services),
- Supply chain management for 'Epidemic and pandemic preparedness' and strategic autonomy for medical aids and medicine.

2. Security

The Netherlands should remain a safe country to live and work for its citizens. This is not something to take for granted. The deployment of our emergency services should guarantee the safety of our citizens. The deployment of our armed forces at home and abroad in case of natural disasters or humanitarian missions is responsible for our safety. The security of important trade and transport corridors is under pressure. Terrorism poses a direct threat to our national security. Organised crime disrupts our society. Our logistics nodes and trade enforcement services play an important role in fighting terrorism and organised crime. This topic relates to the mission 1 and 5 of the KIA Security. Relevant logistics topics in this context are for example:

- Integrated supply chain coordination for fully networked deployment of civil, civil society and armed forces (public-private cooperation),
- Prevention of organised crime, law enforcement, securing the safety and quality of life in the public domain without compromising goods flows in logistics and supply chain (customs, inspection, mainports, waste, and dangerous goods)
- Effective and efficient deployment and dispatching of response, emergency and security services and means of transport (police, fire brigade, defence),
- Effective increase of resilience of infrastructural networks (energy, internet, strategic logistics nodes) and the related processes.



Available budget

The available budget of TKI PPP Funding for this call for proposals is **€ 2,000,000**. This funding has been provided by TKI Dinalog. The Board of TKI Dinalog decides on awarding collaboration projects based on the advice of the programming committee. For the financial structuring of the project, the conditions for TKI PPP Funding ('*TKI PPS Toeslag*') are applicable (see TKI Dinalog – Guide for Project Plan and Program Tender). The co-financing by foreign partners from outside the Netherlands should preferably be done in-cash.

Collaborative projects are research projects conducted by a consortium comprising companies and knowledge institutes. The minimum size of a consortium is one knowledge institute and two companies. These can be two private companies or at least one private company and a public institution. Consortia in which universities and practice-oriented researchers (universities of applied sciences and/or TO2 institutions) work together are encouraged. TKI Dinalog and specifically this call for proposals has the following requirements for projects:

The amount of funding requested in principle should comply with the following:

- Industrial (R&D) research: maximum 50% of total eligible project costs with a minimum of € 250,000 and a maximum of € 500,000 (required maximum of total eligible project costs of € 1,000,000 for a maximum of 3 years).
- Experimental development, piloting and demonstration: maximum of 25% of total eligible project costs with a maximum of € 300,000 (required maximum total of eligible project costs of € 1,200,000 for a maximum of 3 years).

TKI Dinalog prefers not to fund fundamental research with the TKI PPP Funding (as KIA funding is already available for this kind of research).

In principle, the project proposals with a positive decision will be awarded with the total subsidy amount, within the limits as indicated above. The Board of TKI Dinalog strives for a balanced balance between both topics.

Validity call for proposals

This call for proposals is open until the deadline of **Thursday 25th of May 2023** (24.00 hrs). Projects can be submitted up until this deadline. Proposals will be included in the assessment process after this deadline.

