

**BRAIN-be**  
(Belgian Research Action through Interdisciplinary Networks)

CONTRAT N° **BR/121/A5/ FOOD4SUSTAINABILITY**

CONTRACT NR **BR/121/A5/ FOOD4SUSTAINABILITY**

**Action collective pour des systèmes alimentaires durables  
face au changement climatique : évaluation des  
expérimentations sociales et des innovations politiques  
"FOOD4SUSTAINABILITY"**

**Collectieve actie voor duurzame voedselssystemen in een  
context van klimaatverandering : evaluatie van sociale  
experimenten en beleidsinnovaties  
"FOOD4SUSTAINABILITY"**

**ANNEXE I – SPECIFICATIONS TECHNIQUES**

**BIJLAGE I – TECHNISCHE SPECIFICATIES**

ARTICLE 1: DESCRIPTION DU PROJET

**1.1: Titre Action collective pour des systèmes alimentaires durables face au changement climatique: évaluation des expérimentations sociales et des innovations politiques "FOOD4SUSTAINABILITY"**

1.2: Description détaillée du PROJET1.2.1: Résumé

Together, the provision of agricultural inputs, and the production, packaging, processing, transport, and distribution of food, contribute 19-29 % of global anthropogenic greenhouse gas emissions; and they exert an important pressure on natural resources, water, nitrogen and phosphate, and arable land in particular. Reforming food systems towards greater sustainability is therefore essential for a transition towards a low-carbon and resource-efficient society. Though important, economic incentives (including subsidies and fiscal incentives) alone will not suffice to achieve this. The project will identify the conditions for a transformation of food systems that takes into account both the extrinsic (external rewards) and the intrinsic (personal values and social norms) motivations that shape the conduct of actors of food systems, the obstacles and barriers to transition as identified by these actors, and the institutional and governance conditions that must be created in order for such a transition to succeed. Taking into account the heterogeneity of actors' motivations and preferences not only provides a more realistic understanding of behaviour, it also improves our ability to guide a transition towards food systems that contribute to mitigating climate change and that are more resource efficient. The project will study possible transition pathways both in the mainstream food systems that rely on large processors and retailers, and in alternative food systems, that have typically emerged in a bottom-up way, often through local and citizen-based initiatives. We will rely on extensive semi-structured interviews in order to highlight the motivations of actors and which policy innovations can be most effective, taking into account the values and beliefs of the actors of the various food systems.

1.2.2: Mots-clés

Food systems - Theory of collective action - Governance of transition - Innovative instruments - Policy measures

1.2.3: Description***Goals of the research***

Together, the provision of agricultural inputs, and the production, packaging, processing, transport, and distribution of food, represent 19-29 % of greenhouse gas emissions worldwide; and they exert an important pressure on natural resources, water, nitrogen and phosphate, and arable land in particular. Reforming food systems towards greater sustainability is therefore essential for a transition towards a low-carbon and resource-efficient society. Increasingly broad segments of society demand such a switch, and appear to search for alternatives. The consensus on productivism in the governance of food systems, which emerged after the Second World War, has lost much of its appeal and is partly replaced by a variety of new approaches and value orientations. Economic efficiency and technological rationalisation remain important, but they are accompanied by concerns about nutritional quality, food safety, environmental impacts, resource efficiency and equity issues as equally important "organizing principles" around which product innovation and new consumption practices evolve.

The scientific community has captured this changing mood of consumers, and they link it to the challenges food systems currently are facing. International experts define "sustainable diets" as "diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources". Such a definition, by its holistic nature, connects the reform of food systems to broader concerns related to sustainable development, reflecting this change of emphasis, and the heterogeneous motivations of actors that are seeking to transform the food systems. Conventional market incentives and direct regulation increasingly take into account these new concerns. But alongside these classic tools, hybrid governance arrangements, involving governmental, private for-profit and private not-for profit actors have come to play a key role in the provision of collective goods, through initiatives such as the promotion of sustainable diets (such as the LiveWell for LIFE (Low Impact Food in Europe) initiative), short supply chains (food baskets) or innovative product labelling. There is also an increasing interest in citizens reclaiming control over the food systems, by the establishment of food policy councils or other similar initiatives.

Conventional market incentives and direct regulation increasingly take into account these new concerns, but have failed to create an in depth transition towards more sustainable food systems. To overcome this deadlock, policy makers and entrepreneurs in various countries have increasingly developed new types of governance arrangements, which are based on the combination of the conventional policy tools with the organisation of collective processes involving the broadest possible set of actors in the implementation of the policy tools. These hybrid governance arrangements have been put into place, both in the context of the restructuring of markets and in the context of the implementation of direct governmental regulation and subsidies. A prominent

ARTIKEL 1: BESCHRIJVING VAN HET PROJECT

**1.1 : Titel: Collectieve actie voor duurzame voedselsystemen in een context van klimaatverandering : evaluatie van sociale experimenten en beleidsinnovaties "FOOD4SUSTAINABILITY"**

1.2: Gedetailleerde beschrijving van het PROJECT1.2.1: Samenvatting1.2.2: Sleutelwoorden1.2.3: Beschrijving

example of hybrid governance mechanisms combining market exchanges with tools based on collective processes is the proliferation of alternative currency systems in organizations or networks (such as wellness tokens for employers in private companies or currencies for the exchanges of local competences) or created by local or national authorities: examples of such systems with sustainability objectives include the pilot project Eco-Iris in Brussels, which also aims at sustaining the local economy; or the Torekes project in Ghent, which includes urban garden land allocation for revitalizing the deprived area of Rabot-Blaisantvest. A prominent case of hybridization between governmental incentive schemes and collective process in governmental incentive schemes and regulation are the allocation of incentives to collectivities, such as the allocation of EU agro-environmental schemes to local action groups as foreseen within the new Regulation EC No 1698/2005.

All too often, reforms fail because they seek to influence behavior exclusively by incentives that operate "from without" rather than "from within": fiscal and regulatory tools are deployed to create the right set of incentives, but the values actors care about, the social norms they adhere to, or the peer pressure they are subjected to, are ignored. The research seeks to understand such "intrinsic" motivations and to highlight the role they can play in transition. The hypothesis of this project is that various social innovations, often in the form of hybrid governance arrangements, can be scaled up in a cost effective manner by adopting an approach to the governance of collective processes that go beyond the support for niche innovations, by implementing collective mechanisms that rely both on extrinsic (external rewards) and the intrinsic (recognition of personal values and social norms) motivations that shape the conduct of actors of transition systems. The project will test this hypothesis in the specific field of the governance of food systems, and draw policy implications. It will identify collective processes in transition pathways in mainstream food chains, but also in short supply chains and through initiatives for sustainable diets that have emerged as important social experiments that contribute to low carbon and resource efficient food systems. The project focuses on the crucial field of transition of food systems, and aims to test the feasibility of the envisioned policy measures in specific contexts in Belgium. The results of the research, however -- insofar as they will shed light on transition pathways based on actors' motivations -- will have relevance also for other important fields of sustainability transition, such as energy and mobility. In addition, through the actor-based approach of food systems, the project will also be able to analyse issues that are transversal to various transition systems, for example when dealing with the issue of decreasing the food miles and waste management in the food retail sector. The project will pursue two specific objectives, one diagnostic and the other propositional:

- (1) Conduct a comparative analysis of collective processes and actors' motivations in transition pathways in food systems in Belgium, in order to (i) identify the most relevant of those collective processes (from the multinational / large national companies to grassroots initiatives) regarding transition to sustainability; (ii) analyse the trajectories of those selected collective processes over time (emergence, success and failure). This will be carried out with a view to providing a better understanding of the role played respectively by extrinsic and intrinsic motivations, as explained above, as well as of the major barriers and success factors in low carbon and resource efficient transition initiatives; (iii) identify the institutional mechanisms that can facilitate the overcoming of such obstacles by actors operating in specific contexts;
- (2) Analyze, develop and evaluate a set of policy tools that would promote these collective processes and put them on a sound legal and institutional basis.

#### ***State of the art and hypothesis of the research***

The discontent about the current shape of food systems is growing. Part of this is attributable to what an increasing range of actors consider to be two major failures of the post-Second World War evolution of food systems. On the one hand, 870 million people still suffer from hunger. This situation could worsen in the future, as the increasing pressure on natural resources, including drinking water and arable land, is projected to further adversely affect poor farmers and consumers taking into account population growth and shifting diets, as well as the rise in demand for non-food crops, sharp price increases for all major crops may be expected to result from climate change so that by 2050, child malnutrition may increase by 20 per cent. On the other hand, 1.3 billion people have overweight, and among them, 300 million are obese (with a bodily mass index > 130). The latter is to a large extent related to unhealthy food choices, often within food systems causing significant ecological degradation. These evolutions can both be explained by the almost exclusive focus of past efforts on increasing calorie availability, often in total disregard for the adequacy of diets (and for the agriculture-food-health nexus), for the sustainable use of resources (and the health of soils), and for the impacts of agricultural policies on the poor rural populations in the global South. It is unclear how much consumption choices are motivated by such concerns, and whether even those who express concerns about these impacts have a realistic possibility to translate them into their purchasing practices and dietary habits; but that these concerns can play a role cannot be denied.

Another source of concern are the considerable inefficiencies in many food systems today. Roughly one third of the food produced in the world for human consumption every year — approximately 1.3 billion tonnes, more than half the world's total annual cereals crop (which was 2.3 billion tonnes in 2010) — gets lost or wasted. In industrialized countries more than 40 percent of losses happen at retail and consumer levels: consumers waste food by not consuming it on time or by supermarkets discarding food -- resulting in losses of 222 million tonnes per year, almost equivalent to the entire net food production of sub-Saharan Africa (230 million tonnes) --; retailers and consumers routinely throw away edible foodstuffs. Per capita waste by consumers is estimated to represent 180 kg a year in the EU. Quality standards that over-emphasize appearance and marketing practices that encourage consumers to buy more food than they need are two areas in which much progress could be achieved. This is an area of

concern to the FAO, and one in which the European Commission is expected to make concrete proposals in 2013, based in part on the discussions within the Working Group on Food Waste set up in the context of the Advisory Group on the Food Chain, Animal & Plant Health: the target set for the EU is that by 2020, "incentives to healthier and more sustainable food production and consumption will be widespread and will have driven a 20% reduction in the food chain's resource inputs. Disposal of edible food waste should have been halved in the EU".

Because of these various failures, consumers and other actors of the food system consider that a transformation of food systems is urgently needed to change course. A key problem for society, however, is that many of the issues involved in the transition towards sustainable food systems, such as climate change mitigation and decreasing the ecological degradation of agricultural landscapes, involve the production of collective goods, each of which can provide benefits at different scales. Therefore, it is only when societies can organise a fair and equitable set of collective action strategies at local, regional, national and transnational level that a common concern and effective action for these resources can be expected.

Many policy analysts presume that without major external resources and top-down planning by national officials, collective goods cannot be provided. Such presumption is based on a focus on phenomena such as prisoners' dilemma and free riding, in which self-interested agents do not cooperate to produce collective goods in a socially optimal way, even if greater long-term benefit could be achieved from increased cooperation. Yet, as shown in over two decades of research on urban service delivery, on social collaboration through digital networks and on common-pool resources, this presumption is not substantiated by the facts: not all actors all the time act as selfish utility maximizers, unable to be motivated by the search for higher values and a broader range of interests. Indeed, over the last decade, a wealth of experimental evidence has been gathered in behavioural and experimental economics which contradicts the generality of the simplified model of the self-interested rational actor which leads to the behaviour of the prisoner dilemma and free riding in collective action problems. A more realistic theory of human behaviour shows that individuals have the capacity to learn locally adapted strategies in conditions of bounded rationality (so-called heuristics) and adopt and use social norms, other-regarding collective preferences and collectively agreed upon rules in private ordering arrangements for managing collective goods. The latter research therefore points to a more diversified reality and a set of possible institutional solutions based on hybrid governance arrangements that combine design principles from market and non-market private governance arrangements.

However, in order to support transition initiatives towards a low-carbon and resource-efficient society, another obstacle must be addressed. Existing initiatives for transition to sustainable food systems still remain fragmented, incomplete, and limited in scope, with the risk that they may succumb to adverse economic and political pressures over time. Therefore, new governance institutions are needed for organizing transition pathways on a larger scale. In addition, while awareness about the global sustainability crisis is growing, there remains a considerable gap between that awareness and individual lifestyle choices. In effect, there remains a troubling disconnect between the emerging transition initiatives and the broader lifestyle choices of the majority of the population, a gap that recent research in social psychology on environmental risk perception explains as the result of a cognitive dissonance between the knowledge of scientific facts and the need to take responsibility for change by adapting one's personal behaviour. What is needed for a transition to sustainable food systems, is an integrated approach that links pioneering consumer and producer initiatives to the full range of the actors of the food systems, whose motivations are diverse and heterogeneous, and cannot all be reduced to price incentives.

As also stated in the UNEP Global Survey on Sustainable Lifestyles, environmentally related motivations that drive pioneering social innovations can become much more powerful, when associated with other well-established motivational drivers such as concern for nutritional quality and social equity. In other terms, the heterogeneity in actors' preferences and values should not be seen as an obstacle to the up-scaling of these initiatives: instead, such heterogeneity can be seen as an asset, as it multiplies opportunities for leverage towards more sustainable food systems. However, as also shown by the literature on other regarding preferences and social norms in collective action, this will not happen without appropriately designed collective rules and participatory governance processes. Therefore, private ordering arrangements involving both pioneer initiatives and broader actor networks could become a major driver to increased production of environmental collective goods, if combined with the already existing fiscal and regulatory tools that provide the right set of incentives, and empowered by processes of knowledge co-production operating within the widest possible range of social actors.

### ***Research project***

Two lessons from the contemporary research on collective action are directly relevant for analysing the contribution of pioneering initiatives and social learning processes in governing the transition to sustainable food systems. First, it has been shown that institutional rules for addressing problems of free-riding and for dealing with opportunistic self-interested behaviour can be established in an effective and robust way, even in the absence of external rule enforcement by the state, through the recognition and the promotion of social norms and other-regarding personal values that contribute to the production of collective goods. Second, these new models of behaviour also call for a new role of the state in support of these networks, by removing legal and organisational barriers for the further "up-scaling" of transition initiatives and by supporting knowledge co-production and capacities for social learning in these networks : "nested markets", for instance, that emerge on a local level to reconnect

producers with consumers through long-term relations built on trust, often can only prosper with some support from state agencies.

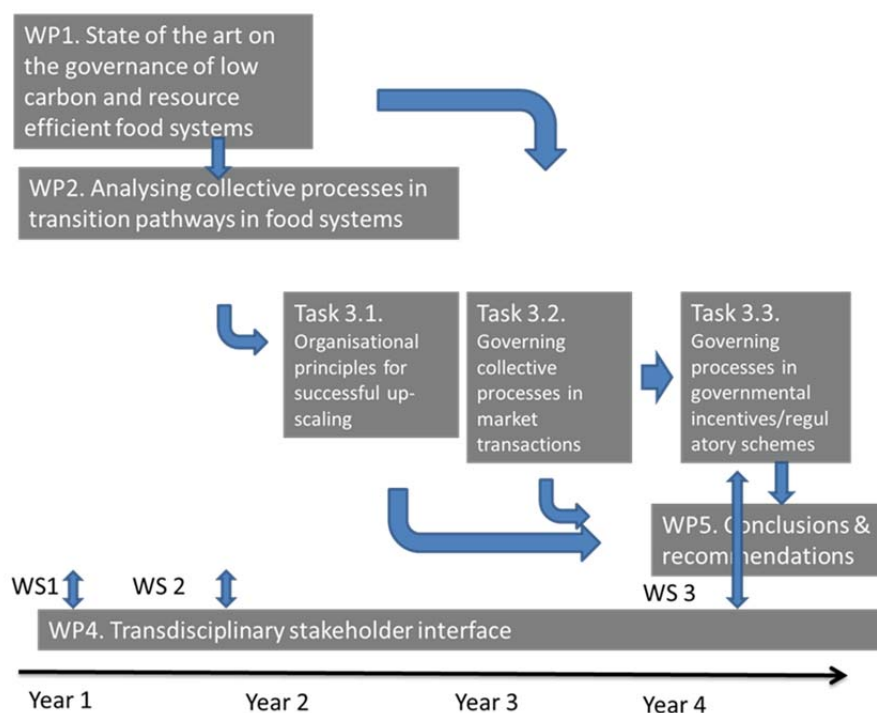
This project will explore to what extent these two features of collective action based on the governance of collective process (often in combination with direct state regulation or restructuring of markets, such as through partnerships with citizen initiatives and non-profit organisations, corporate social responsibility, etc.) are relevant to the understanding of transition pathways for sustainable food systems, while acknowledging that transition initiatives both have to overcome a set of structural barriers to the transformation of food systems and to initiate long-term transformative processes of values and actors' perceptions. In particular, this project will evaluate if, and to what extent, the design principles of organized collective action highlighted in the literature have to be modified to take into account the socio-ecological interdependencies (for instance to deal with the impact of technological choices on use of natural resources, which implies to deal with uncertain and complex possible futures), and to ensure a greater implication of users and stakeholders in the governance of transition pathways for sustainable food systems.

## ARTICLE 2: TACHES DU PROJET

Les tâches spécifiques du PROJET sont les suivantes :

## ARTIKEL 2: PROJECTTAKEN

De specifieke taken van het PROJECT zijn de volgende:



### WP1. State of the art on the governance of low carbon and resource efficient food systems

*Task 1.1. Review of the literature on institutional tools and governance mechanisms for low carbon and resource efficient food systems (CPDR-BIOECONOMICS)*

There exists a rich literature on the governance of transition in general, and on the governance of transition towards low-carbon societies in particular. An emerging literature now also addresses the transition of food systems specifically, some of which from the researchers involved in this project. The research will carry out a literature review focused on (i) the interactions between technological innovations and socio-economic context, (ii) the role of actors' motivations, and (iii) the policy tools that are used in transitions, and how they relate to (i) and (ii).

*Task 1.2. Review of legal and policy frameworks applicable to food systems in Belgium (CPDR-CEB)*

This task will consist in mapping the most important legal and policy frameworks that apply to the food chains in Belgium, "from farm to fork". It will involve a description of the regulations and policies pertaining to production (seed regulations,

environmental standards applicable to the use of pesticides and fertilizers, incentives under the Common Agricultural Policy), to processing, and to retail (including Regulation (EC) 1221/2008 establishing the standard import values for determining the entry price of certain fruit and vegetables, as modified by EU Regulation 543/2011 (as such marketing standards on fruits and vegetable have a major impact on throwing away of non-standard fruit and vegetables)); rules concerning the labelling of food products, for instance for organic agriculture or to provide information about environmental impacts, including carbon footprint (see for instance Regulation (EC) 66/2010 on the EU ecolabel); land use regulations and rules related to land planning, insofar as this may influence the possibility for urban agriculture to emerge as well as the organization of farmers' markets or other means of ensuring adequate access to food for certain categories of consumers). This mapping will also include a survey of the rules concerning public procurement, thus influencing the sourcing policies of schools or public administrations. Finally, the researchers will examine voluntary initiatives from the main actors of the food chain, in particular through their representative organizations such as FEVIA (Federation of the Food Industry). Considered together, these various components of the regulatory and policy framework define the context in which actors operate in the food systems in Belgium, and they may facilitate, or instead impede, innovations towards the transition to sustainable food systems. The study will not attempt to provide a detailed or exhaustive description: this mapping will, however, help identify these impacts.

## **WP2. Mapping collective processes in transition pathways in food systems in Belgium**

Work package 2 will conduct a comparative analysis of collective processes relying both on extrinsic motivations (based on monetary and non-monetary external rewards) and intrinsic motivations (personal values and social norms) in transition pathways in food systems in Belgium. More specifically it will focus on 3 categories of practices which have sufficiently similar institutional features: practices of (i) food production and processing, (ii) food distribution and retail and (iii) food consumption. All three kinds of food practices are constitutive and interconnected elements of the food systems.

The methodology of the work under WP2 will build upon the agency formulation of transition theory, with a view to emphasizing the role of human actors as the ultimate sources and carriers of change. This approach has already been applied successfully to the analysis of transition pathways in the field of food consumption, retail and production in various country case studies. However, while this previous research on transition pathways in food systems addressed the mediation between niche innovations and regime change, and social learning on the level of the landscape, the innovation in this project is to systematically analyse the drivers for collective action at the level of behavioural motivations of actors involved in pioneer initiatives and evaluate the effectiveness of rules of collective action that aim to link these initiatives to a broader set of actors in the field of food consumption, retail and production. Therefore, the research work will draw upon the most relevant elements of the literature on social innovation, and social practices, on the role of intrinsic and social motivations in behavioural economics and the literature on behavioural routines in evolutionary economics.

To achieve this objective, each of the tasks under WP2 will be organized in two components:

- (Task 2.1) : mapping the existing national, regional and local initiatives that aim to contribute to the transition towards sustainable food systems and selecting the most relevant of these initiatives for further analysis ;
- (Task 2.2): conducting a diagnostic comparative analysis of the success and failures of the governance arrangements in these initiatives.

### *Task 2.1. Mapping and analysis of collective processes in transition pathways in agriculture (CPDR-CEB-SRTG)*

Transition initiatives can take the form of the emergence of alternative food systems, often at citizens' initiative, and often with a view to relocalizing food systems by shortening the supply chains. Short supply chains are systems in which consumers prefer to buy their food from local sources for both social and environmental reasons. Often, but not necessarily, such systems are based on direct contact between producers and consumers. The establishment of short supply chains is based on a combination of supply-driven, demand-driven and institutional factors. Research has confirmed the importance of consumer concern for food safety, animal welfare, environmental effects, regional development and the interest in better quality and fresher food. Farmers turn to direct marketing practices as a key strategy for survival. Among these initiatives that lead to the emergence of alternative food systems are a range of initiatives to support organic agriculture or agro-ecological practices (such as the movement for "Agriculture de conservation" in Wallonia); community supported agriculture; or local groups that rely on food baskets (GAC, AMAP, Voedselteams, etc.). This is a fast-growing and diverse area. However, to establish short supply chains substantial transaction costs need to be overcome. Cooperation is crucial in saving on such transaction costs.

The search for sustainability is not limited to bottom-up, citizen-driven initiatives: it is one that cuts across different food systems, and the various actors operating within them. For instance, some recent foresight studies insist on a specific trend in the private sector linked to agriculture and food, from an agro-industrial model to a "tertiarised agro-industrial model", where food products tend to become services more than industrial or primary products. In such a model, the multinational and large national companies of the food processing and retail industry play a crucial role in enabling changes in both the production paradigm and the

consumption patterns. In this context, a number of companies are developing a set of initiatives for greening the supply chains as an integral part of their strategy, often by joining forces (e.g., SAI platform) or by entering into new governance initiatives together with NGOs (such as the Marine Stewardship Council). This also leads to an increasing adoption of codes of conduct and of social and environmental standards, and an increasing role for certified products.

The project will map these various initiatives, and then assess those that are considered to be the most illustrative and promising in the collective search that is underway. The survey will include some major initiatives that seek to change the behavior of consumers, and encourage more reasonable modes of consumption. Among these are the development by the non-profit organisation EVA (Ethisch Vegetarisch Alternatief, <http://www.evavzw.be/>) of a network of local sections in Brussels and Flanders; the slow food section in Brussels, Flanders and Wallonia (9 convivium, cf. [www.slowfood.com](http://www.slowfood.com)); or the growing success of urban vegetable gardens. This workpackage includes two tasks.

The first task will be to **document the existing national, regional and local collective initiatives** related to production and processing; to distribution and retail; and to consumption. As already mentioned, this will cover a whole range of processes in mainstream food systems, but also in short food chains / localized food systems, and it will include initiatives related to sustainable diets and diversified nutrition. These processes involve a wide range of actors, ranging from multinational and large national companies to NGOs investing in multistakeholder initiatives, to individual citizens involved in bottom-up local grassroots initiatives.

The second part of this task will consist in **selecting the most relevant initiatives for deeper analysis**. Beyond the initial mapping, the study will focus on a limited range of initiatives. The sample will be chosen to cover the different food systems (from the most globalized / mainstream to the localized / shortest) and to address the different stages of production, processing, distribution and consumption. The choice will also be guided to cover initiatives that are driven by different categories of actors: large agribusiness corporations and retailers; public authorities, at national, regional and municipal levels; and NGOs and citizens' organizations. The study will not be exhaustive, but will provide an in-depth study that will be representative of the full range of initiatives identified in our mapping. This will allow the team to raise the key questions, and to enter into a dialogue with all major stakeholders, consistent with the project's aim which is to arrive at a better understanding of the various motivations of actors and how these various motivations interact with socio-technical regimes and the regulatory environment, as well as how they could serve as a leverage for policies in support of transition. To guide this part of the inquiry, the team intend to have between 120 and 180 semi-structured interviews, over a period of one year, addressing the mainstream food system, alternative/local food systems, and initiatives aimed at sustainable diets/consumption (this methodology is described in greater detail under 8 below).

*Task 2.2. Comparative analysis of the key factors for emergence, success and failure of the governance arrangements in the selected initiatives (CPDR-SRTG-CEB)*

Building on Task 2.1. and the selection of a representative range of initiatives, Task 2.2. will consist in a comparative analysis of the key factors that shape the trajectory of the transition initiatives over time. This analysis will be carried out by focusing on four sets of core variables: (i) the diverse motivations of actors (ranging from economic/financial incentives to values related to the identity of actors and social norms enforced by peer pressure), (ii) the organizational architectures (distributed versus vertical integration of local initiatives), (iii) the collective action rules in use (strong boundaries versus partial or total openness to more heterogeneous set of actors), and (iv) the role of public agencies (or their absence) in the success of such initiatives.

(i) The various motivations of actors shall be identified through semi-structured interviews with these actors. Though the study will primarily focus on the actors already involved in certain transition initiatives, these actors will also be asked about their position towards initiatives in which they are not involved, because they ignore them, distrust them, or have not been provided an opportunity to be invited to join them. The objective through these interviews is to understand better why certain initiatives remain confined to "niches", why others succeed in being scaled up or replicated beyond the initial experiment, and why others are short-lived: what are the ingredients of success, and what are the reasons for failure? While motivations of actors are of course only one part of the explanation -- and of course, motivations are shaped by the environment and can be transformed --, they are considered as a major part, though often neglected and misunderstood.

(ii) Another factor which must be studied, concerns the organizational structures that allow certain initiatives to flourish, while others die. "Organizational structures", for instance, mean the existence of networks that can accelerate the diffusion of certain initiatives beyond their experimental stage, or that can favor the exercise of peer pressure to join certain initiatives; the ability for the actors that have the greatest stake in transition (such as concerned citizens, environmental NGOs, or retailers concerned to preserve and enhance their reputation) to mobilize around an initiative in order to garner support and to make it succeed; or the ability for different levels of governance to be addressed in order for local initiatives to benefit from a supportive environment, and for national-level or sector-wide initiatives to obtain a "buy-in" from the local environments in which they are to be implemented.

(iii) A third factor that will be studied is the emergence of collective action in the shaping and development of certain initiatives, i.e., that new actors and new institutions may have to be established in support of such initiatives, and that networks of actors may have to be reconfigured. For instance, environmental groups could join forces with unions in order to encourage a particular retailer or food processor to join a multistakeholder initiative; local citizens organisations could team with a retailer in order to ensure improved access to supermarket shelves to local producers; NGOs could work with municipalities to design a policy for sustainable sourcing of food for public purchases. These alliances can be ad hoc, but they can also lead to the institution of new actors, and lead the traditional actors to redefine their interests -- as when unions find that there may be advantages in insisting on environmental sustainability, or as when retailers discover that sourcing food locally, as demanded by their clients, may in fact, beyond the reputational gain, present advantages from the point of view of logistics.

(iv) Fourth, the research work will pay particular attention to the role of public authorities at all levels. In the range of factors that contribute to success or explain the failures of transition initiatives, the regulatory framework -- including by labelling and hence endorsing private-led and voluntary initiatives --, public policies, public subsidies or fiscal incentives, or the role of public authorities in facilitating the emergence of networks or new actors, can be essential. The team will seek not only to highlight this role, but through the structured initiatives, to identify what other roles the public authorities could play to favor transition initiatives: what are the expectations of the actors involved in such initiatives? And how to have public authorities support and facilitate transition initiatives, without this leading to stifle innovation and limit the imagination from bottom-up initiatives?

On the basis of this comparative analysis, the study will identify the key success and failure factors and the type of governance that is most supportive of transition initiatives. The research work will move from testing the hypotheses about key factors and the relevance, in the analysis of such initiatives, of motivational factors, to the development of a grid of analysis that can serve in public debates about how to organize and support transitions in the food systems. Before that grid of analysis can be proposed, however, another component of the transition towards sustainable food systems, more directly connected to governance issues, must be addressed.

### **WP3. Implications for the design of innovative governance arrangements**

Work package 3 deepens the analysis proposed in WP2. In WP3, the project will analyse and evaluate existing hybrid governance arrangements for involving the broadest possible set of actors of the food systems, and actors related to the transition of the food systems, in transition pathways, with a view to proposing innovative model arrangements. The result of the work in WP3 will be the formulation of roadmaps with possible measures, actions and initiatives that various actors could take. These actors include of course the agricultural producers and their unions, the agrifood corporations and the retailers, but also the industries providing services for the food system actors in the field of energy or transport/logistics. But they also include the public authorities at different levels, the consumers, and other stakeholders, such as NGOs (both environmental NGOs and fair trade organisations) and unions. Understanding how these actors interact with one another and how they can be encouraged to work collaboratively -- even though their preferences can be largely heterogeneous -- is key for succeeding the transition towards sustainable food systems.

The hypothesis is that even diverse preferences can be reconciled, provided that processes in which the various preferences or priorities of different actors can be recognized and valued through appropriate governance arrangements (sometimes called "partnerships" or "multistakeholder initiatives", depending on the context) are set up. Heterogeneity of preferences should not be treated as an obstacle: instead, acknowledging such heterogeneity, and the associated diversity of perspectives, is important to design governance systems that can work. Moreover, once such governance arrangements are established, this can lead the actors involved to revise their preferences, and to identify new convergences and alliances that may never have been explored hitherto: the relationship between governance arrangements and preferences of actors is dialectic and involves constant feedback and revision.

Based on the study of the governance arrangements that allowed for transition initiatives to develop, the research will develop roadmaps -- pathways -- identifying some of the various trajectories to evolve towards a low-carbon and resource efficient food system, in the different food systems, and at different segments of food chains, from production to consumption. These roadmaps are not intended as blueprints: only the actors themselves, facing their specific constraints and with their specific constituencies, are in a position to identify the trajectory that can suit them best. But the roadmaps produced can be facilitative: they can broaden the imagination of actors, and lead these actors to assess whether the way they define their interest (whether they resist moving towards a transition or whether they prefer one pathway to another) should not be re-examined. What will be proposed is intended to be used by private and public actors as a detailed and user-friendly manual for realizing and stimulating low carbon impact and resource efficiency.

A synthesis of the organisational principles of collective processes in successful governance of transition pathways will provide the basis for the work of WP3. This will be based both on the results of the research in WP2 and a literature review (Task 3.1). In a second step, an in depth analysis will be conducted of a set of new prototypes of governance frameworks for organising



collective processes, which build upon the key features of these organisational principles (Task 3.2 and Task 3.3). Finally, in a third step, a roadmap with a set of model agreements for governing collective processes in the various transition pathways analysed under WP2 will be developed, taking into account the specificities of the various actor and stakeholder communities that are involved in the food system (Task 4.2).

Two main governance options for building collaborations between governmental, private for profit and private non-profit actors will be considered under this work package. The first option is based on the governance of collective processes in market transactions, as for example in participatory product labelling schemes (on the model of IFOAM's participatory guarantee system or, in part, on the model of GLOBALG.A.P., a certification scheme that covers the production process for farm inputs to the farmgate) (in Task 3.2). The second option is based on the governance of collective processes in governmental incentive or regulation schemes. An existing initiative that illustrates this option is the deliberative assessment of agro-environmental measures (for national implementation of the second pillar of the CAP) (Task 3.3). The two options can of course be complementary, and hybrids can emerge. Thus, State-based regulation may be based on existing standards, initially developed by private actors. A well-known example in the European Union is Regulation (EC) No. 852/2004 of 29 April 2004 on the hygiene of foodstuffs, which seeks to protect food safety "from farm to store". That regulation essentially encourages food business operators to establish and operate food safety programmes based on the principles of "hazard analysis and critical control point" (HACCP), that had been initiated by the food industry.

#### *Task 3.1. Organisational principles of collective processes in successful governance of transition pathways (CPDR)*

A synthesis of the organisational principles of collective processes in successful governance of transition pathways will provide the basis for the work of WP3. This synthesis can build to a certain extent upon the analysis of up-scaling of niche innovations and regime transformation in various fields such as energy, food or mobility. However, this project aims to go beyond niche innovators and address collective processes at all levels of the food systems, and with a broad and heterogeneous set of private sector and public sector actors.

Task 3.1. of WP3 will therefore identify organisational principles for collective processes through (1) an analysis of the commonalities and differences between the existing collective processes in transition pathways analysed under WP2, and (2) a systematic literature review of the organisational principles in the case study literature on these processes both in Belgium and in other countries.

#### *Task 3.2. Governing collective processes in market transactions (CEB - BIOECONOMICS)*

In Task 3.2. an in depth analysis will be conducted of a set of new prototypes of governance frameworks for organising collective processes in market transactions, covering both frameworks that address the collective processes to involve all the actors of the mainstream and short supply chains in the food system as frameworks that address the involvement of consumers and broader stakeholders in the transformation of diets and nutritional standards. A limited number of governance arrangements will be analysed and developed, based on the main existing prototypes already established in practice, and covering respectively two categories: (1) governance of collective processes in the development of market standards and labelling; and (2) governance of collective processes in coordination agreements amongst actors in the transition pathways. Examples of the first category that will be considered are participatory certification schemes or stakeholder consultation in the establishment of carbon labelling. Examples of the second category are government support for the standardisation across retailers of codes of conduct that include environmental commitments (such public intervention being justified to establish a common level playing field or in order to improve the information of the consumer). Based on the results of WP2, and more specifically on the results linked to financial issues, a third aspect which is related to both these categories will also be investigated which is the role innovative financial instruments. Based on one partner's experience in microfinance and complementary currencies that include a market dimension (e.g. WIR system in Switzerland or RES system in Belgium), the study will analyse which institution could be the most efficient in promoting the emergence and success of some of the identified collective processes. Examples where this aspect could be developed in the Belgian context include community supported agriculture, vegetable box schemes (microfinance) and business to business systems for mutual credit (complementary currencies).

#### *Task 3.3. Governing collective processes in governmental incentive/regulatory schemes (CEB - CPDR)*

Task 3.3 will consist in conducting an in depth analysis of a set of new prototypes of governance frameworks for organising collective processes in governmental incentive/regulatory schemes. The project will cover both schemes that seek to provide incentives to individual actors (but do so through participatory collective processes) and schemes that are addressed to collective entities such as municipalities or schools instead of individuals. It will pay attention in particular to what seem to represent three particularly promising innovations : (i) the combined reliance on class economic incentives and non-financial incentives, which build on the heterogeneous set of intrinsic motivations of the actors; (ii) the use of incentives and subsidy schemes that are allocated directly to collective entities, instead of individuals, with the expectation that the beneficiary entities allocate the

incentives and subsidies through participatory processes, which allows for priority-setting at the most decentralized level : this is experimented successfully in certain German Länder, for instance, for the use of agro-environmental subsidies that are going to municipalities; and (iii) the reliance on systems of complementary currencies.

This third innovation -- the reliance on complementary currencies -- deserves a more detailed explanation. The study will be based on the review of existing complementary currency pilot projects used as policy instruments for sustainability, such as E-portemonnee in Limburg; Torekes in Ghent, Eco-Iris in Brussels and the Belspo research project INESPO. Using those innovations as a departure point, the project will explore the possibility of designing innovative system(s) of complementary currency that can enhance the role of the collective initiatives analysed in WP2, bearing into mind the key factors for success and failure that have been identified. The design of this innovative policy instrument will strongly benefit from the experience the CEB (ULB) has achieved in designing such projects, in particular through the Innovative Instruments for Energy Saving Policies (INESPO) Belspo project and the feasibility study of the Eco-Iris project for Brussels Environment.

But designing what systems based on the idea of complementary currencies is insufficient, unless combined with an analysis of the legal framework that is required for such systems to reach a certain scale and to be fully integrated into society. Indeed, the current experiments, though still largely pilot projects, already makes it possible to identify three key legal issues which have to be considered: (1) issuing currency; (2) the relevance of corporate law and rules applicable to companies such as competition, VAT, taxes, etc.; and (3) the aspects linked to services offered within the complementary currency systems, such as labor law, undeclared work, etc. This part of the research will track the emergence of those issues in existing complementary currency projects and question the legal framework regarding those aspects. The project will provide first guidelines to develop a sound legal basis for complementary currencies to find a place in our societies.

#### **WP4. Transdisciplinary stakeholder interface**

##### *Task 4.1. Collaborative problem framing (CEB -CPDR)*

The transdisciplinary stakeholder interface will be composed of a collaborative team composed of scientific experts and key stakeholders on the issues of low carbon and resource efficient food systems.

The work under this task will first aim at building a stakeholder database, and organise a first feedback on stakeholder perceptions on the transition towards sustainable food systems through a short email survey. In a second step, building on expert knowledge on low carbon and resource efficient food systems as well as on the experience of actors of the food systems, two multistakeholder workshops will be organized at strategic times for the deployment of the research, in order to

- (i) achieve a collaborative framing of the challenges linked to the transition to sustainable food systems and agree on some elements of a diagnosis of reasons for successes or failures identified (workshop 1, CPDR);
- (ii) identify the most promising initiatives, whether they relate to the mainstream food systems or to emerging alternatives, and whether they originate in private sector initiatives, in initiatives from public authorities, or in citizens' initiatives (workshop 2, CEB).

##### *Task 4.2. Strategies for integrating the results into societal practice (CPDR-CEB- BIOECONOMICS)*

Developing the main conclusions from WP3 into a synthesis mapping the most promising initiatives and proposing a diagnosis about the conditions for success, requires identifying the obstacles to be addressed for such initiatives to prosper -- including which supporting role, if any, public agencies could play. The objective is not to provide a blueprint from a transition; it is to allow each actor of the food systems to understand the range of options available, and the benefits from social innovations, at both local level and in global food supply chains. This multistakeholder evaluation of the roadmaps developed under task 4.2 will be developed through a third multistakeholder workshop (organized by BIOECONOMICS).

#### **WP 5. Conclusions and recommendations**

##### *Task 5.1. Institutional fit analysis and proposition of public policies (CPDR)*

This task will integrate the results obtained by the different partners in the analysis of the transition pathways through an analysis of the institutional fit of the governance mechanisms analysed under WP3 and the behavioural drivers of the actors analysed under WP2. As there is no "one size fits all" solution, the main issue is to create a better fit between the best available hybrid governance arrangements (both of market, collaborative and governmental type) and the various (intrinsic and extrinsic) motivational drivers of the actors. In particular, in order to foster wide acceptance of the proposed arrangements this integration should include the results of the interaction organised with the stakeholders.

##### *Task 5.2. Summary and Recommendations (CPDR-CEB-BIOECONOMICS)*

The aim of this sub-task is to produce a synthetic document with

- A summary of the main findings of the project;
- A set of recommendations for the design of public policies that could best support social innovations that can contribute to a gradual transition towards more sustainable food systems, associated with a description of the impacts that can be expected from the implementation of such public policies.

## **WP6. Coordination and dissemination**

### *Task 6.1. Coordination (CPDR)*

The role of the coordinator in the network management is firstly, to ensure a clear and effective communication between the different partners and with PPS Science Policy and secondly, to coordinate the work of all partners in order to guarantee the smooth execution of the project. The coordinator shall ensure that the deliverables shall meet the highest scientific standards and that they shall be delivered on time; and that the means available for the research shall be used in the most efficient way possible.

In order to achieve these objectives, the coordinator shall convene regular meetings between all partners. A kick-off meeting will officially start the project, introduce the new researchers recruited on the project to the relevant existing knowhow and documentation, and fine-tune the work programme. However, as partners have a good knowledge of their mutual competences, little time will be needed as 'learning curve'.

Quarterly technical meetings will allow the partners to discuss and assess work progress and encountered difficulties, propose solutions, take suitable decisions and if appropriate, reorient precise tasks. One of these meetings, at the end of the first year, will assess achievements and lessons learned, and fine-tune the work program for the second project year.

A final meeting will assess the overall project; prepare the workshop and follow-on work after the project.

### *Task 6.2. Reports and dissemination (CPDR-CEB-BIOECONOMICS)*

The project will have 6 deliverables, associated to the major work packages of the project. These deliverables specific to each workpackage will be integrated in the annual reports required in accordance with Article 7:

**D1: 'Positioning "Food4Sustainability"',** at the end of **month 9**, containing the results of Tasks 1.1. & 1.2:

- an overview of existing policies and measures in Belgium and at EU level on low carbon and energy efficient food production, distribution and consumption
- an overview of relevant legal and policy frameworks in Belgium and the EU applicable to food systems
- a report of multi-stakeholder workshop<sup>1</sup> on challenges and diagnosis of success and failures (WS1) Task 4.1(i)

**D2: 'Driving forces of Food4sustainability',** at the end of **month 27**, containing the results of WP2 Tasks 2.1. & 2.2 :

- the results of the mapping of collective processes in transition pathways in mainstream food chains, short food supply chains and sustainable nutrition initiatives
- the results of the interviews on actors' motivations in collective process for transition
- report of multi-stakeholder workshop<sup>2</sup> on the identification of the most promising initiatives (WS2) Task 4.1(ii)

**D3: 'Food4Sustainability best practice governance principles',** at the end of **month 33**, containing the results of Task 3.1:

- the results of the literature review on governance of collective practices
- the results of the analysis of the commonalities and differences on "best practice governance principles" within the existing collective process
- issues analysed through the interviews

**D4: 'Designing Food4Sustainability',** at the end of **month 39**, containing the results of Task 3.2:

- a first design document, containing proposition based on two major types of market-related collective arrangements that rely on participatory certification systems and industry wide codes of conduct. Both major types will have several customisable design options and parametrisable features to be evaluated.
- a second design document, containing proposition based on two major types of government related collective arrangements that rely on alternative currency systems and allocation of incentives/subsidies to collectivities. Both major types will have several customisable design options and parametrizable features to be evaluated.

**D5: 'Food4Sustainability Roadmaps for transition',** at the end of **month 45**, containing the results of Task 3.3:

- developing the main conclusions from WP3 into a synthesis, mapping the most promising initiatives
- roadmaps for transition, allowing each actor of the food systems to understand the range of options available, and the benefits from social innovations, at both local level and in global food supply chains.
- a report of multi-stakeholder workshop 3 (WS3)Task 4.2

**D6: 'Food4Sustainability conclusions and recommendations'**, at the end of **month 51**, containing the results of WP5

- summary of the analysis of governance architectures and options proposed in the roadmap
- summary of the overall project findings
- some recommendations or guidelines for defining efficient policies and measures

### ARTICLE 3: CALENDRIER DES TACHES DU PROJET

3.1: Le commencement et l'achèvement des tâches décrites à l'article 2 de la présente annexe correspondent respectivement au DEBUT OPERATIONNEL et au TERME OPERATIONNEL.

3.2: Les délais d'exécution des tâches sont les suivants :

### ARTIKEL 3: TIJDSHEMA VAN DE PROJECTTAKEN

3.1: De aanvang en het einde van de taken omschreven in artikel 2 van deze bijlage, stemmen respectievelijk overeen met de AANVANG DER WERKZAAMHEDEN en de BEEINDIGING DER WERKZAAMHEDEN.

3.2: De uitvoeringstermijnen van de taken zijn de volgende:

			Year 1		Year 2		Year 3		Year 4		TOTAL P.M	
			M. 1-9	M. 10-15	M. 16-21	M. 22-27	M. 28-33	M. 34-39	M. 40-45	M. 46-51		
<b>WP1 State of the art on the governance of low carbon and resource efficient food systems</b>												<b>12</b>
Task 1.1	Institutional tools & governance	CPDR	3									
		SRTG	3									
		CEB	1									
Task 1.2	Legal & policy frameworks (Belgium)	CPDR	5									
<b>WP2 Mapping collective processes in transition pathways in food systems in Belgium</b>												<b>57</b>
Task 2.1	Mapping and selection	CPDR		9	4							
		SRTG		6	3							
		CEB		3	1							
Task 2.2	Comparative analysis of key factors	CPDR			7	11						
		SRTG			3	6						
		CEB			1	3						
<b>WP3 Implications for the design of innovative governance arrangements</b>												<b>17</b>
Task 3.1	Organisational principles	CPDR				4						
Task 3.2	Governing (market transactions)	SRTG				6						
		CEB				1						
Task 3.3	Governing (governmental incentive/regulatory)	CEB				2	3					
		CPDR				1						
<b>WP4 Transdisciplinary stakeholder interface</b>												<b>18,5</b>
Task 4.1	Collaborative problem framing	CPDR	0,5	2,5	0,5	0,5	0,5	0,5				
		CEB			1							
Task 4.2	Strategies for integration into societal practice	CPDR						5				
		SRTG						6				
		CEB							1,5			
<b>WP5 Conclusions and recommendations</b>												<b>7</b>
Task 5.1	Institutional fit analysis & public policies	CPDR							1			
Task 5.2	Summary and Recommendations	CPDR								1		
		SRTG							1	1		
		CEB							1	2		
<b>WP6 Coordination &amp; dissemination</b>												<b>6,5</b>
Task 6.1	Coordination	CPDR	0,5	0,5	0,25	0,25	0,25	0,25	0,25			
Task 6.2	Reports and dissemination	CPDR			0,25	0,25	0,25	0,25	0,5	0,25		
		SRTG							0,5	0,5		
		CEB							0,5	1		
	Follow-up committee		X					X		X		
	Workshop			X	X				X			
<b>Totals</b>			<b>13</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>15</b>	<b>15</b>	<b>6,25</b>	<b>5,75</b>	<b>118</b>	
			<b>M. 1-9</b>	<b>M. 10-15</b>	<b>M. 16-21</b>	<b>M. 22-27</b>	<b>M. 28-33</b>	<b>M. 34-39</b>	<b>M. 40-45</b>	<b>M. 46-51</b>	<b>TOTAL</b>	
			CPDR	9	12	12	12	6	6	1,75	1,25	60
			SRTG	3	6	6	6	6	1,5	1,5	36	
			CEB	1	3	3	3	3	3	3	22	
			<b>Total</b>	<b>13</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>15</b>	<b>15</b>	<b>6,25</b>	<b>5,75</b>	<b>118</b>

**ARTICLE 4: COMITE DE SUIVI DU PROJET**

Chaque projet est accompagné par un comité de suivi.

Le comité de suivi est composé d'utilisateurs potentiels des résultats de recherche tels que des représentants des instances publiques nationales ou régionales, européennes ou internationales, d'acteurs de la société civile, de scientifiques, de représentants du secteur industriel, ... La participation des membres du comité de suivi n'est pas rétribuée.

Ce comité a pour but de suivre activement le projet et de promouvoir la valorisation de la recherche par l'échange et la mise à disposition de données et d'informations, par l'apport de différents avis, par la suggestion de pistes de valorisation, ...

L'apport et l'avis du comité de suivi doivent être joints aux rapports d'activités et aux rapports finaux à fournir au SERVICE.

Le RESEAU est tenu de préciser dans le rapport initial, mentionné à l'article 7.1 de la présente annexe, la composition du comité ainsi que le fonctionnement et les objectifs spécifiques du comité (nombre de réunions, mode d'échange d'information, rôle des membres...).

Le cas échéant la composition du comité peut être modifiée en accord avec le GESTIONNAIRE DE PROGRAMME.

**ARTIKEL 4: OPVOLGINGSCOMITE VAN HET PROJECT**

Elk project wordt begeleid door een opvolgingscomité.

Het opvolgingscomité is samengesteld uit potentiële gebruikers van de onderzoeksresultaten zoals vertegenwoordigers van publieke instanties op nationaal, regionaal, Europees of internationaal niveau, maatschappelijke actoren, wetenschappers, industriële actoren... De eventuele deelnamekosten van de leden van het opvolgingscomité worden niet terugbetaald.

Dit comité heeft als doel de actieve opvolging van het project te verzorgen en de valorisatie van het onderzoek te bevorderen, via o.a. de uitwisseling en het ter beschikking stellen van gegevens en informatie, het geven van adviezen, het aanbrengen van valorisatiepistes ...

De inbreng en het advies van het opvolgingscomité dient toegevoegd te worden aan de activiteiten- en eindverslagen die aan de DIENST worden overgebracht.

Het NETWERK dient in het aanvangsverslag waarvan sprake in art. 7.1 van deze bijlage, de samenstelling van het comité, evenals de werking en de specifieke doelstellingen ervan (aantal vergaderingen, wijze van informatie-uitwisseling, rol van de leden...) te specificeren.

In voorkomend geval kan de samenstelling van het comité gewijzigd worden mits akkoord van de PROGRAMMABEHEERDER.

[l.1: Olivier DE SCHUTTER / Tom DEDEURWAERDERE – UCL \(C\)](#)

[l.2: Erik MATHIJS – KULeuven \(P2\)](#)

[l.3: Marek HUDON – ULB \(P3\)](#)

6.5 Coopération internationale

Néant

ARTICLE 7: RAPPORTS

Nonobstant les dispositions de l'article 2.2 de l'annexe II, le RESEAU fournit au GESTIONNAIRE DE PROGRAMME, par l'entremise de son COORDINATEUR, les rapports suivants pour approbation:

7.1: Rapport initial: Le rapport initial est remis dans les trois mois à dater du DEBUT OPERATIONNEL. Il comprend:

- une description de l'état de la connaissance, dans le domaine du projet, au sein du RESEAU,
- une liste nominative du personnel qui participe au PROJET et qui est à charge ou à disposition du PROJET,
- une liste des équipements mis à la disposition du PROJET,
- une liste des conventions et contrats, en ce compris ceux de valorisation des résultats, qui lient les INSTITUTIONS, ou qui sont en voie de conclusion, dans le domaine de recherche du PROJET. Les éventuels brevets dont disposent les INSTITUTIONS sont également mentionnés. Cette liste comporte au moins l'intitulé et l'objet des contrats, conventions et brevets, leur durée et leur incidence financière, ainsi que l'identité des contractants et déposants, et ce sans préjudice de l'article 13 de l'Annexe II.
- les membres du comité de suivi du PROJET
- la convention interne au RESEAU, telle que décrite à l'article 4.2 du contrat.

Nonobstant les dispositions de l'article 4.7 de l'annexe II, toute modification de l'information fournie dans le rapport initial est signalée dans le rapport d'activités transmis au terme de l'année au cours duquel ce changement survient.

7.2: Rapports d'activités périodiques

Les directives concernant le contenu et la forme des rapports sont transmises par le GESTIONNAIRE DE PROGRAMME au RESEAU.

Les rapports sont remis annuellement.

Ces rapports présentent l'état d'avancement et les acquis des recherches ainsi que les prévisions pour l'année suivante. Ces informations se réfèrent explicitement aux tâches et au calendrier du PROJET définis aux articles 2 et 3 de la présente annexe. Ils fournissent également, le cas échéant, toute modification des données reprises dans le rapport initial de même que la liste des publications et des missions réalisées au cours de l'année écoulée.

7.3: Rapport final: Ce rapport est remis avant le TERME OPERATIONNEL ou, le cas échéant, dans les deux mois qui suivent la date à laquelle il est mis fin au contrat conformément aux dispositions de l'article 15 de l'annexe II. Il donne une description complète du PROJET, des résultats obtenus et de

6.5 Internationale samenwerking

Nihil

ARTIKEL 7: VERSLAGEN

Onverminderd de bepalingen van artikel 2.2 van bijlage II, legt het NETWERK, door toedoen van zijn COORDINATOR, de volgende verslagen ter goedkeuring voor aan de PROGRAMMABEHEERDER:

7.1: Aanvangsverslag: Het aanvangsverslag wordt binnen de drie maanden na de AANVANG VAN DE WERKZAAMHEDEN ingediend. Het omvat:

- een beschrijving van de stand van de kennis van het NETWERK in het domein van het project,
- een nominatieve lijst van het personeel dat aan het PROJECT deelneemt ten laste of ter beschikking van het PROJECT,
- een lijst van de uitrusting ter beschikking gesteld voor het project,
- een lijst van contracten en overeenkomsten, met inbegrip van die voor de valorisatie van de resultaten, die de INSTELLINGEN binden in het onderzoeksdomein van het PROJECT, alsook de contracten die binnenkort gesloten worden en de octrooien waarover de INSTELLINGEN eventueel beschikken. In deze informatie staan minstens de titel en het voorwerp van de contracten, overeenkomsten en octrooien, de duur en de financiële weerslag ervan alsmede de identiteit van de contracterende partijen en de octrooiaanvragers, en dit zonder afbreuk te doen aan art. 13 van Bijlage II,
- de leden van het opvolgingscomité
- de interne overeenkomst van het NETWERK, zoals vermeld in artikel 4.2 van het contract.

Onverminderd de bepalingen van artikel 4.7 van bijlage II, wordt iedere wijziging van gegevens uit het aanvangsverslag in het activiteitenverslag aangegeven, op het einde van het jaar waarin de wijziging plaatsvond.

7.2: Periodieke activiteitenverslagen

De richtlijnen met betrekking tot de inhoud en de vorm van de verslagen wordt door de PROGRAMMABEHEERDER aan het NETWERK doorgegeven.

De activiteitenverslagen worden jaarlijks ingediend.

De verslagen geven een overzicht van de voortgang en de resultaten van het PROJECT, alsmede de vooruitzichten voor het volgende jaar. Deze informatie verwijst uitdrukkelijk naar de taken en het tijdschema van het PROJECT omschreven in artikels 2 en 3 van deze bijlage. Zij geven ook, in voorkomend geval, iedere wijziging van gegevens uit het aanvangsverslag, alsmede de lijst van publicaties en dienstreizen aan, die zich voordeden tijdens het afgelopen jaar.

7.3: Eindverslag: Dit verslag wordt voor de BEEINDIGING DER WERKZAAMHEDEN bezorgd of, in voorkomend geval, binnen de twee maanden die volgen op de datum waarop het contract beëindigd wordt conform de bepalingen van artikel 15 van bijlage II. Dit verslag geeft een volledige beschrijving van

leurs éventuelles applications scientifiques et technologiques et indique la mesure dans laquelle les objectifs fixés ont été atteints.

Conjointement au rapport final, le RESEAU, fournit, via le COORDINATEUR, une fiche (maximum 2 pages) décrivant les résultats du projet, les conclusions éventuelles et les indications nécessaires pour la gestion en matière de diffusion et de valorisation. Ce document est rédigé en néerlandais, français, ainsi qu'en anglais.

Les directives concernant le contenu et la forme des rapports sont transmises par le GESTIONNAIRE DE PROGRAMME au RESEAU.

#### 7.4: Rapport destiné à l'évaluation externe du PROJET:

Si le SERVICE le juge utile, il peut demander au RESEAU, conformément à l'article 2.5 de l'annexe II, un rapport d'activités destiné à une évaluation externe du PROJET.

Les directives exactes portant sur le contenu et la forme du rapport, ainsi que la date pour laquelle le cas échéant ce rapport doit être remis, sont transmises par le GESTIONNAIRE DE PROGRAMME au RESEAU.

7.5: Rapport de valorisation: Le RESEAU s'engage, par l'entremise de son COORDINATEUR, à fournir au GESTIONNAIRE DE PROGRAMME, à chaque fois que la demande lui en sera faite, un rapport en vue de soutenir scientifiquement des actions de valorisation et support ayant trait au PROGRAMME. Les modalités concernant la remise de tels documents seront déterminées par le GESTIONNAIRE DE PROGRAMME.

7.6: Sur la base du calendrier des tâches établi à l'article 2 de la présente annexe, les rapports suivants doivent être remis aux dates suivantes:

<b>RAPPORTS / VERSLAGEN</b>	<b>Date de remise / Datum van afgifte</b>
Rapport initial / Aanvangsverslag	02/01/2014
Rapports d'activités / Activiteitenverslagen	30/09/2014
	30/09/2015
	30/09/2016
Rapport final / Eindverslag	31/12/2017

Cette annexe comprend 7 articles.

Fait à Bruxelles en 5 exemplaires, le .....

POUR LE RESEAU:

het PROJECT, de behaalde resultaten en hun eventuele wetenschappelijke en technologische toepassingen en geeft aan in hoeverre de doelstellingen bereikt werden.

Samen met het eindverslag dient het NETWERK, via de COORDINATOR, een fiche in (maximum 2 bladzijden) waarin de projectresultaten, de eventuele besluiten en de aanbevelingen voor het beleid inzake de verspreiding en de valorisatie ervan worden beschreven. Dit document wordt opgesteld in het Nederlands, het Frans en in het Engels.

De richtlijnen met betrekking tot de inhoud en de vorm van de verslagen worden door de PROGRAMMABEHEERDER aan het NETWERK doorgegeven.

#### 7.4: Verslag bestemd voor de externe evaluatie van het PROJECT:

Indien de DIENST dit nuttig acht dan kan aan het NETWERK, zoals bepaald in artikel 2.5 van bijlage II, een activiteitenverslag worden gevraagd bestemd voor een externe evaluatie van het PROJECT.

De exacte richtlijnen met betrekking tot de inhoud en vorm van dit verslag, evenals de datum waarop dit verslag desgevallend moet worden ingediend, worden door de PROGRAMMABEHEERDER aan het NETWERK doorgegeven.

7.5: Valorisatieverslag: Het NETWERK, door toedoen van zijn COORDINATOR, verbindt er zich toe, de PROGRAMMABEHEERDER telkens als die erom verzoekt een verslag te bezorgen, om zo valorisatie- en dienstverlenende acties met betrekking tot het PROGRAMMA wetenschappelijk te ondersteunen. De manier waarop deze documenten moeten worden voorgesteld en ingediend, wordt vastgelegd door de PROGRAMMABEHEERDER.

7.6: Op basis van het tijdschema voor de taken in artikel 2 van deze bijlage, dienen de volgende verslagen op de volgende data te worden ingeleverd:

Deze bijlage bevat 7 artikels.

Gedaan te Brussel, in 5 exemplaren op .....

VOOR HET NETWERK:

<b>Code</b>	<b>Nom / Naam</b>	<b>Institution / Instelling</b>	<b>Signature / Handtekening</b>
	Olivier DE SCHUTTER		.
C		UCL	
	Tom DEDEURWAERDERE		.
P2	Erik MATHIJS	KULeuven	.
P3	Marek HUDON	ULB	.

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