

# European High Speed Railway, Understanding Design Contradictions For Long-Term Urban Architecture Strategy

TRIGGIANESE, Manuela<sup>1</sup>

<sup>1</sup> Faculty of Architecture, Delft University of Technology, the Netherlands

## Abstract:

The urban cores of the modern metropolis around the world exploded in the 1960s, marking the beginning of the end of the *metropolis era* and affecting urban planning and policy-making. Furthermore density convergence plays a key role in the emergence of a new urban form, the expansive, polynucleated, densely networked and globalized *city-region*. (Soja, 2011) In such phenomenon *mobility* is one of the strongest drivers of the urbanized world in the creation of a compact sustainable urban environment. Combined with technology, information and the increasing need for people to live in attractive places, it leads to the creation of a dispersal *polycentric* urban reality. Over the last decade there is a shift from the monocentric dualism of dense city and sprawling low-density suburbanization to a polycentric network of urban agglomerations, especially strategic interventions around infrastructural nodes, i.e. multimodal transportation hubs. Gradually *World Cities* (Hall, 1966; Friedmann, 1986) are undergoing rapid developments, within a very uncertain future, pushed by the high-speed line (HSL) infrastructural strategy. In China, for example, Beijing-Shanghai HSL will connect the cities to Tianjin, embracing 24 station locations in the larger emerging *Bohai Bay* mega-region. Polycentrism has become increasingly important within the current urban debate, resulting from globalization and urban growth and shifting the idea of *Global City* (Sassen, 2001) to *Polycentric Mega-City Regions* (Hall and Pain, 2006). In the context of *polycentric* urban structure, the Randstad Holland in the Netherlands represents a model of reference within the international context. Since the last decade, the infrastructural development deeply influences urban form and, within the architectural discourse, theoretical thinking and design scenarios, provoking academic discussion on the conflicting and possible relationships between urban policies-scenarios and concrete design proposals. However the growth of the population in urban areas and the expansion of the region towards North-Central Europe, creates new urban conditions for the vision Randstad towards 2040, looking at the densest cities of Amsterdam and Rotterdam as main European and international gates, whose high-speed train (HST) station hubs will be analyzed in this contribution. Exploring their geographical advantages, the Cities try to give form to policies' abstraction of the vision with tools of *collaborative platform* for urban interventions and not urban planning conceived as the *end-product* of complex negotiation processes. The research project aims to understand, by theoretical and empirical studies, how can design interact with policy methods and creative solutions to solve problems related to land use, transportation and the environment. In this framework, the research project focuses on the difficult relationship between the ambitions, long-term master planning, and the urban development processes, within short-term conditions. Furthermore the conclusions attempt to open a discussion on the potentialities of the research topic for further investigations.

Keywords: *Infrastructure, Polycentric Mega-City, Station Area Development, Urban Design, Architecture*

## 1. Introduction

In Europe the emerging mega-regions (Fig. 01) are going to be connected by HSL by 2050, addressing large-scale ambitions to clusters of urban developments at the intersection of main roads, railways and local infrastructures (EC, 2011). Mastering and understanding what is expected of them is thus a major strategic objective in the creation of a *city-region* that is not only compact, but also intelligent and networked.

Gradually the Mega-City<sup>1</sup> is shifting to the concept of *Mega-City Region* as a new spatial phenomenon; the term comes from Eastern Asia, where it was originally applied to areas like the Pearl River Delta and Yangtze River Delta regions in China. (Hall, 2009) Already in 1961 Gottmann defines the term *Megalopolis*, metropolitan areas, with the following characteristics: big center of reference, the physical discontinuity of the urban settlement, the functional continuity of the network as independent to the minor urban settlements, the economic force. In the European POLYNET study, the Dutch Randstad has been listed among *polycentric mega city regions*, together with Rhine Ruhr, Rhine Main, South East England, Central Belgium, European Metropolitan Region Northern Switzerland, Paris Region and Greater Dublin, defined as agglomerations of smaller constituent city regions: Functional Urban Regions (FURS). (Hall, Pain, 2006)

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<sup>1</sup> For further investigations on the concept of *Mega-Cities* refer to the series of lectures published in Buijs et al., 2010

According to Gregotti despite of globalization processes and the emerging 'network society' the provisions by Gottmann are still influencing contemporary conditions in Europe. (Gregotti, 2011) In the Dutch context, for example, the High Speed Line helps to consolidate the city's position in the polycentric urban network on a regional and international scale. At the city region scale, the principle of sustainable *concentrated deconcentration* (gebundelde deconcentratie)<sup>2</sup> suggests the growth that should be guided to selected development corridors along strong public transport links, including high speed and metro lines, which would not present continuous urbanization, but clusters of urban developments around nodes of the European networks. In those intersections, high densities and compact city are often seen as a pre-requisite for sustainable urbanization and economic growth. (Hall, 2011)

Furthermore the polycentric character of the Randstad, the economic engine of the Netherlands, encompassing the cities of Amsterdam, Rotterdam, The Hague and Utrecht, is an exemplary case study within the international context, where the infrastructure becomes an urban corridor of fragmented realities. (Hall and Pain, 2006)

In the XXI century the Dutch government decided to improve all main stations that are more or less linked to the high-speed network. They are called the Nationale SleutelProjecten (NSP), the key projects around six stations (Utrecht, Den Haag, Breda, Rotterdam, Amsterdam and Arnhem) with a total of 3 million 7 hundred and 50 square meters in which 1.6 million offices, 1.4 million mq for inhabitants and other programs will be build. The condition of accessibility to the inner city is the primary objective of the Dutch strategy of NSP, aimed at the renewal of stations and its urban surroundings with public services and real estate developments in the construction of *local* and *global* conditions. (Castells, 1996)

In Europe during the last decade the increasingly combination of public policy with private initiatives helps to change the territories of major and middle-size cities to promote and position, as strategic sites, leftover spaces and neighborhoods around multimodal transportation hubs, located in or out-side the heart of the City. With the advent of the High Speed Train, the desire to reconfigure the station and its intermodal character and a number of large real estate projects supported by the Railway Company and private stakeholders contribute to initiate urban interventions for these areas. Consequently, reflections on complex transformations related to infra-urban development aim to focus on strategies of exchange interfaces, which today are conditioned by the practical need to provide flow and locations for social, political and cultural life: a *complex architecture project*.

In the consolidated city, dispersal city and even more in the post-metropolis the urban voids (the in-between space of private and public activities) assume new meanings. Furthermore at the intersection of different modality of transport (the high speed railway, metro, tram, bus, bike, pedestrian flows) interventions don't belong exclusively to one of the traditional disciplines Urban Planning and Architecture.

When the train enters into the city, stations become multimodal hub with different types and uses of space, that feature distinct, superimposed layers of building structure, spatial flow, accessibility for public amenities and mobility interfaces. These issues are even more creating a new coexistence between housing, leisure, work, institutions, and between private space and city space. As far as architecture is concerned, those conditions allow *urban design* to play a fundamental role with controlled dimensions. What seem to be essential is the different relations merging in an unique system, the separation between pedestrian- cycle flows and traffic, private space and public areas.

Therefore areas around railways have been represented core urban projects for the near future, which involve urban change in different levels, from the scale of architecture and urban design of the terminal, called *intermodal hubs*, to the large scale of the city, including *spin-off* interventions in the station district. New are also the close links with different kinds of infrastructure, with respect to the renewal of the railway station but also the enlargement of the existing underground system and its relationship with a new light rail system, local trams and buses. As the large-scale project is in the city, it changes the skyline and the urban tissue with its parameters of logistics (traffic net of the city), size, height and the number of users (people traffic in and making use of the station district). Additionally to generic program of housing and offices, a rather large program of urban entertainment has been drawn up for the new strategic projects in the configuration of the contemporary *Creative city*. (Landry, 2000; Florida, 2002)

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<sup>2</sup> The principle of *concentrated deconcentration* (gebundelde deconcentratie) was defined in the Second Report of Physical Planning in the Netherlands (1966), a long term strategy for the year 2000, that is the first comprehensive government policy statement concerning the physical structure of the Country. (Faludi, A., van der Valk, 1994)

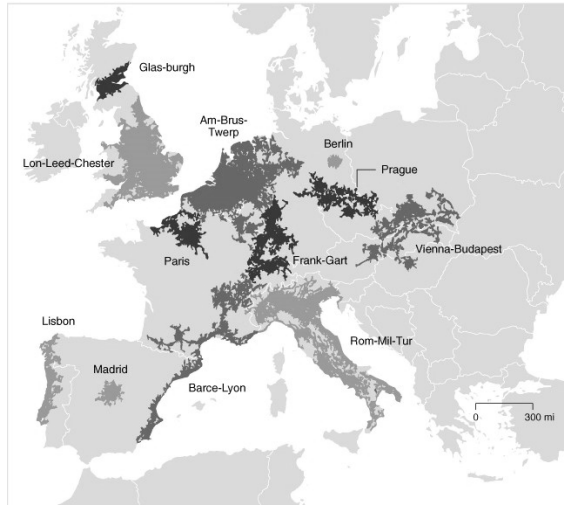


Fig. 01 Map by Guilden and Morris, *Mega-regions of Europe*, taken from *creativeclass.com* by Richard Florida (accessed March 2014)

### 1.1 Research Context

The *Randstad Metropolitan Region* with its strategic interventions around high-speed stations (NSP), or *intermodal hubs*, i.e. the test sites Amsterdam Zuidas and Rotterdam Central District, represent a milieu case study within the international context and a starting point for the proposed research investigations. The Region belongs to the *North Western Metropolitan Area* or NWMA (Belgium, Netherlands and Germany) with its character of different configuration of city-region or polycentric city, the *'pluricittà'* as defined by Gottman. Bernardo Secchi describes the NWMA as a large megacity in a Delta region with extraordinary infrastructural density where some parts of the infrastructure are abandoned, others have been transformed or constructed anew, in the creation of porous urban spaces. In the polycentric reality the condition of *porosity* according to Secchi is a great opportunity for the urban (re) configuration of the European city where 'the notion of zone and hierarchy disappear'. (Secchi and Viganò, 2009) Above all, it has to be taken into account the possibility of considering the rail infrastructure not as a closed railway that connects more or less quickly places far from each other, but a 'spine with urban fragmented and dispersed spaces in the territory they cross' (Ricci, 2013).

It was at the end of the last decade, that the strategic vision of the National Spatial Planning, the Nota Ruimte (VROM, 2005) was embedded by a new idea of Dutch context, inserted within the European metropolitan scale and long-term policies. The vision drops the *Delta Metropolis*<sup>3</sup> concept in favor of an implementation of the Randstad into the north and south wings, which can be seen as separated *poly-nuclear city-regions* of semi-metropolitan density. Furthermore the new perspective of expanding the Randstad towards national borders and North-Central Europe was envisioned by a double strategy.

The first is based on the rebalance of the urban population with the inclusion of the two urban axes of the wings, the HaarImmermeer-Schiphol-Zuidas-Almere axis and the Breda- Eindhoven-Tilburg axis, together with infrastructural projects as main activators of the metropolitan strategy. Secondly the new vision pushed Randstad's major cities towards a multi scalar dimension through the upgrading of main intermodal urban hubs, along the high speed line: Rotterdam City, with the development of its harbor and the *Central Station District*, and Amsterdam, with Schiphol Airport implementation and the transport node Amsterdam Zuidas. Therefore current policy visions have been translated by means of *place-based* model and *long-term* projects. In the new approach the investments in key areas, such as infrastructure and complex urban interventions, are strongly

<sup>3</sup> In February 1998, the council members for land-use planning of Amsterdam, Rotterdam, The Hague and Utrecht (cities along the Delta of the Rhine) issued the *Delta Metropolis* Declaration stating that the success of the Netherlands within Europe, would be determined by the ability to develop and sustain a successful European Mega-City, an urban constellation of international stature and impact. Two years later, the Delta Metropolis Association was founded; its members were cities, regions, water boards, chamber of commerce, housing corporations, employer associations and environment organizations. (Frieling, 2010 p 321)

The concept of *Delta Metropolis* represents "a changing mosaic of villages, towns, cities and a multitude of urban overflows, innovation and fragments – the sprawling city – in a controlled and carefully managed dynamic maze of scenic and urban components, the synergy of which relies on a sophisticated and interlinked transport and communication system, - the compact city". (Ibelings, H., 2000)

coordinated and focus on city-region relationships towards the development of its metropolitan reality. (Triggianese, Berlingieri, 2014)

The traditional picture of the Randstad, as a single open zone surrounded by cities, will be replaced by multi diversity in accordance to an *area-specific* approach. The current Randstad 2040 Structural Vision<sup>4</sup> makes the original *Green Heart* part of a larger *Green- Blue Delta*, being made by steering development towards a different kind of integrated dimension. The future picture is of a green-blue backbone interwoven with economic clusters, such as agriculture, housing, work and leisure activities, and with functions such as nature, water storage and cultural history. This development attempts to offer a basis for a system of smaller green-blue links with the mayor cities, becoming an attractive complement to sustainable urbanization.

The strategic infrastructural changes, associated to urban developments around transportation hubs, will be illustrated by the test sites Amsterdam Zuidas and Rotterdam Central *station area* or *District*, (table 1) whose developments process will take almost twenty years from now, currently on the drawing board. (Trip, 2008)

Table 1. Key figures on the Zuidas and Rotterdam Central District projects (taken from Kloosterman and Trip, 2011)

Programme	Zuidas	Rotterdam Central District
Total programme	2,673,000 mq	553,500 mq
Business	44%	56%
Residential	42%	19%
Amenities	14%	25%
Floor Space Index	Central area: 3-9, other areas: 2-5	3.3 or more
Completion	2030	2020

## 1.2 Research Methodology

Within the current urban debate on the phenomenon of high speed infrastructural development and the above mention Dutch place-based policy, this contribution attempts to define the impact of the organization of the planning and design process of selected HST stations on their urban surroundings. The research paper includes reflections on procedures and design process prior the actual design for interventions, in which the relationship between the different actors involved in the project, the local and national government, the railway company and the investors, play an important role.

The analysis presented here is based on a multitude of sources, such as on site visits, existing literature, project plans as presented in planning documents and on websites, including design of the future interventions. In addition, policy and scientific documents, press articles and research reports help to provide data concerning both the master plan and the impact on the urban context. Furthermore conversations with designers, involved in the planning process of the selected case studies, help to give an idea about their role in the midst of many interested parties.

Looking at the different spatial scales (urban, district and station), in terms of programming, architecture, public spaces and the relationship with other modes of transports, the case of “train station development projects” refers to projects where the (re) development of station adjacent property is the primary element and driving motivation of development activity. Such projects include public-sector rail land conversion projects as well as largely private - sector driven and commercially oriented real estate projects with a longer-term purpose in mind. Therefore the research focuses on the difficult relationship between the ambitions (plans) and the urban development process (reality), on the implication of the high speed infrastructural system on the transformation of contemporary cities, as catalyst of urban renewal, and the capacity of design to deal with complex conditions.

## 2. Intermodal Hubs – Dutch experience

The case of high-speed train (HST) station area (re) development is considered a challenge to anticipate and adequately respond to the transformation of today’s and tomorrow’s urban form and restructuring process. However at specific moments in time the era of large stations and competition with the airports looks failed. Today announced developments do not make it beyond the planning stage. There is a large number of unrealized HST station area (re) development project in Europe. Countless projects have been abandoned, scaled down or being postponed. (Fig. 02)

In the Netherlands, as anywhere else for that matter, there are currently difficulties in realizing the planned *New Key Projects*, urban development projects around HST stations of the major cities, which lead to the tendency to

<sup>4</sup> Randstad 2040 Structural Vision 2008, <http://www.rijksoverheid.nl> (accessed May 2013)

isolate the station as hub limiting the scale of intervention; this could happen with Rotterdam central station. Up-scaling the ambitions from large-scale projects to small-scale interventions also means thinking in even longer time frames, typically spanning well over one generation from the first conceptualization until building out. Two projects have been selected in North-West Europe: Zuidas in Amsterdam and Central Station District in Rotterdam, the ongoing ‘New Key Projects’ in the Netherlands.



Fig. 02 Map of High Speed Network in Europe, Update November 2013  
source: www.uic.org, data from International Union of Railways (UIC) (accessed March 2014)

## 2.1 Amsterdam Zuidas<sup>5</sup>

Since 1998 first strategic design proposals, the evolution of ‘Zuid-as’, *Southern axis*,<sup>6</sup> focused on the construction of a large and stacked tunnel where infrastructure - highways, railway and high-speed line - will pass together with the development of high-density urban district. A parallel approach accompanied the design vision: the urbanisation of both sides of the infrastructural rest as a new landscape icon, and the relocation of infrastructure in the underground, together with a lack of a clear integrated strategy. In the new design approach, the Southern axis along the A10 ring road has been conceived as a top location within the city, as well as a *city region* core area, attracting major commercial investments at the Zuid Station.

For a total area of 207 ha the proposed and accepted design intervention *Dok Model*, among different options more difficult to implement in phases and insufficiently flexible, consists of the disappearance of the A10 infrastructural bottleneck from the ground and the development of a new business district, with mixed-use buildings; it brings together main private investors with the public sector for a total of 1.385 Million Euro expected investments. The increasingly conflict between the multiple actors appears evident within the complexity of contemporary governance policy that succeeded in the last decade in the project development. In this context of institutionally and financially complicated process of decision-making, the proposal still force to incorporate tunnels with mixed-use developments on the top. In order to deal with uncertainties in economy and policy, the *Zuidas-Dok Project Organization*, cooperation with the Directorate General for Public Works and Water management, Prorail – government task organisation for maintenance and extension of the national railway network infrastructure -, the city Region and the city of Amsterdam, was established in mid 2010.

The public and private companies presented Zuidas vision in the on going construction sites of high dense offices and mixed use buildings surrounding the infrastructural bundle. (Fig. 03) In the evolution of ideas about spatial organisation, important tools are the *implementation* of a more consistent network of open spaces and the overcoming of the *infrastructure barrier*, by integrating the north and south flanks as one urban core area. In practice, a step-by-step plan stretching over 20 years is envisaged, which keeps options open and flexible as

<sup>5</sup> The author’s extended contribution, ‘Triggianese, M. and Berlingieri, F., *Intermodal Nodes for the European Metropolis. Amsterdam Zuidas. EUROstad’s gate*’ to the International Conference ‘New Metropolitan Perspectives’ held in Reggio Calabria (May 2014), has been published in *Advanced Engineering Forum* (AEF) international journal Vol.11., 2014, pp 220-226

<sup>6</sup> The Southern Axis, namely a green field site on either side of Amsterdam’s southern ring road and close to the international Airport, is the most spatially dynamic area in the Netherlands. (Maajor, 2008 pp 67-118)

long as possible, among others, on the infrastructure integration model, and which allows under any condition a maximum of development.

The latest *Ambition Document ZuidasDok* (DRO, 2013) will give direction and strategic advice to the articulation of demand on the market to achieve the maximum possible ambitions within the budget cutbacks. Public and private actors, together with technicians and designers, conducted a reality check on the draft document during workshops, roundtable and consultations, plus a digital survey of potential stakeholders and interested parties. At the present, negotiations between partners are being held about the feasibility of the Dok Model, providing the integrated framework for making choices, from the perspective of the relationship between infrastructure, city and country.

The project Zuidas, also known as *Financial Mile*, is facing the credit crisis without reaching a unique vision for its double design approach as new urban reality and intermodal hub. The complex infrastructural interface is now envisioned as urban basement instead of its original underground figurativeness, as well as the relation between urbanity and infrastructure seems to be a never ended decision-making process and open program. In this context, the Dok Model is a prime example of how major Dutch cities are readdressing the current generic vision Randstad 2040 and the desire to increase their metropolitan identity with strategic urban and architectural interventions as well as innovative sustainable approaches.

Since 1998 the master plan has been developed gradually and constantly changed design in terms of sub-projects; studies on the feasibility of different options have been simultaneously carried out. (Bertolini and Spit, 1998) The plan is now an open grid, a development strategy and a framework - in the spirit of flexible urban development. The priority has been given to the realization of the railway and the dock tunnel, together with a mixed suburb with many visitors and a mixed population for housing presence, different from *La Defense* idea. Finally the form, the function and the scope of urban policy and the rise of a new mode of urban governance look at the increasing involvement of private sector interests both in design and implementation. Therefore the intermodal urban node Zuidas is a collection of artifacts (roads, buildings and infrastructure) with management activities between different actors (city councils, consultants, designers, stakeholders) and between city dreams (documented in plans and visions) and acts (as a result of actions of social actors); it arises then the question on how new metropolitan conditions will be developed all over European urban realities.

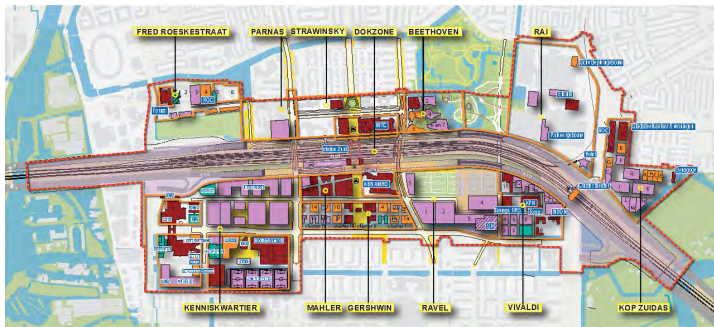


Fig. 03 ProjectenKart, *Amsterdam Zuidas*, source: DRO, *Ambitiedocument Zuidasdok*, 2013

## 2.2 Rotterdam Central District

After the WWII Rotterdam starts to plan strategic interventions for the area around the station, as illustrated in the Basic Plan (1946). The most recent renovation plans for the HST station aims to improve Stationplein and its surrounding areas, that was since then a coming and going of trams, buses and cars. For pedestrians the road to the town centre ran over or around the crowded square, without a clear wayfinding especially to those arriving in Rotterdam by train for the first time. The area has been known as a neglected and messy part of town, not a place to stay but an urban area to avoid. The Groot Handelsgebouw, built in 1956 by Masskant on the west side of the station, was a massive building containing a large number of companies renting office space. The Conradstraat, named after one of the railway pioneers of the nineteenth century, was a hidden street between Groot Handelsgebouw and the railway line, which led to an indoor ice-skating rink that was hidden behind blue walls and was proving increasingly unprofitable. With the coming of the HSL and new forms of public transport like Randstad Rail, a light-rail to The Hague, there were plenty of opportunities to give to these immediate surroundings of the station a thorough facelift. (Mandaag, 2014)

It was in 1998 that the report *Rotterdam CS, verkenning van het programma* (Rotterdam CS, exploration of the program) already saw plenty of urban potentialities to create an attractive combination of living, working and urban entertainment around the station. This report was compiled by the representatives of the Ontwikkelingsbedrijf Rotterdam (OBR, Rotterdam Development Company, the department of Spatial Planning

and Housing (dS+V), the officials of the ministries of Housing, Spatial Planning and the Environment and of Economic Affairs, NS Vastgoed (Dutch Rail Real Estate) and NS Stations.

On the basis of the program, the Municipality presented the first Master plan for the central station area in 2001. This earlier master plan for a new station building and a metamorphosis of its surroundings, designed by the British architect William Alsop, was focused on cultural issues and leisure as marketing issue and commissioned by the local government. Proved too ambitious, it was rejected by the new elected government, the social-democrats (2002). Upon reconsideration, the local authorities initially focused on the building itself, with an international competition for building the multimodal hub.

Only after it became clear that it was unfeasible without interventions in the surroundings, did parties from the adjacent premises become involved in the plans. Besides large multinationals like Nationale Nederlanden/ING and Unilever, the station area accommodates small creative companies, some of which have formed the Creative Cube, located in a renovated office building at the Delftsestraat. The new station and the HSL are expected to give the area powerful impetus, turning it into a popular venue for culture, trade, meetings and events, or a modern, internationally oriented working environment, where living, culture, education and shopping come together. There is a room for some 650 new dwellings (doubling the current number) and 400,000 to 500,000 square metres of new office space.

In order to complete an attractive station area by the moment the HSL went into use, in 2005 the selected architects TEAM CS of the new station building (a combination of Benthem Crouwel Architects, MVSA Meyer en Van Schooten Architecten, and landscape firm West 8) were given the assignment to involve the area of Conradstraat and Delftsestraat and to the north of the station in their study: they had to make clear which new construction activities were possible on that spot. Therefore in the same year the council presented a new urban development plan for the area. The Project developer LSI owned several properties in the area including the old station post office turned into a building with special office spaces. The vision also did not match up with the urban development plan of the council. The dissatisfaction speeded up the process of involving the neighborhood more with the forming of the plans.

In 2007 the new idea that surfaced during meetings with local and potential stakeholders, was composed of two main components: the 'mixone' and the Groothandesgebouw (Wholesale building) of the 21st century. The first is a matrix for the joint area with different components, which see the cooperation between local and global players and open network, a mixed use area with different scales and scenes; the second is the translation concept of the former icon of Groothandesgebouw to a contemporary setting, with economic and commercial activities in the district. The idea was also a rethinking of all degrees open spaces, public and semi-public.

Within the possible development strategies the important players are: the municipality, developers, owners, managers and users. The urban development plan (stedebouwkunding plan) by Gemeente Rotterdam and DS+V was adopted in 2008 by the board of mayor and aldermen. Maxwan architects and urbanists supervise the 20 ha area surrounding the new Central Station. The Master plan provides a key to the transformation of an isolated, unattractive business environment into well-connected lively part of downtown Rotterdam.

For each project in the programme (offices, public transport, leisure, retail, Mixone, housing) a set of guidelines is provided that will secure high quality design of the public realm and its buildings. The "Mixone" vision was translated into a spatial concept under the following conditions: Rotterdam Central District in balance, liveable city, street connection and sublime public space. The new masterplan was developed from the previously agreed principle of the vision Weena | Glocal City District. This document was completed with the quality plan and Weldsparagraag in 2009. The most recent structural vision Rotterdam Central District in 2011 is a planning *framework* for the station quarter area to be phased for developments in the coming 10-20 years. (Fig. 04)

It takes into account all relevant policy documents, national, provincial, municipal and sector level. Phasing, financial viability, including funding for public space, environmental feasibility are key words in the currently documents. Each small project, such as at Schiekadeblock, is embedded in a larger scale analysis of the urban context and accepts the current playing field of highly decentralized and privatized urban development, planning and policymaking.

In the public-private coalitions – as opposed to many of the partnerships since the 1990s – the roles, responsibilities and agendas of the different players are sharply defined. All parties share an interest in establishing *urban quality*, by connecting different user groups, areas, programs and institutions. All parties are also convinced of the spatial and social need for less fragmentation, less segregation, more cohesion and more coexistence. Municipal urban planners offer their knowledge of the city and of the long-term developments in order to embed each project in municipal policies. Client-users – mostly housing corporations and project developers – provide a question and an idea of use. Instead architects translate the question into a spatial and symbolic answer.

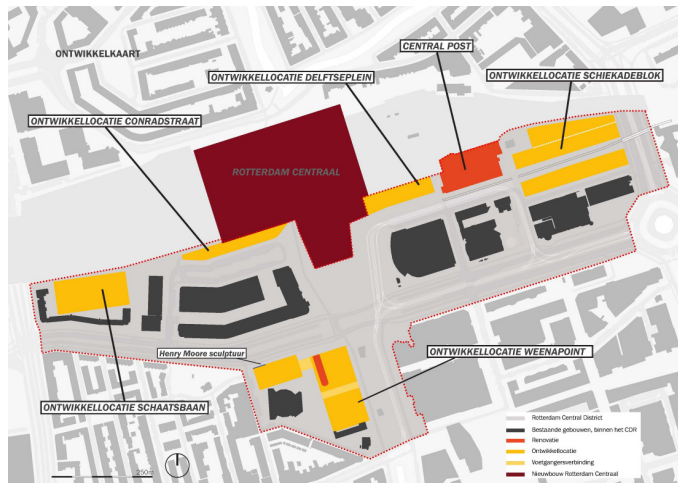


Fig. 04 Projectenkaart in *Rotterdam Central District* source: Quality Plan (Gemeente Rotterdam, Maxwan A+U)

### 3. Conclusion

In both case studies Amsterdam Zuidas and Rotterdam Central District, the plan has a function as a *blueprint* of the intended final result. Just as the reality of institutions precedes the reality of the plan, the latter may be considered an image of a desired social reality, in which the plan has been carried out successfully. As such, however, the project plan also serves as a *platform* to unite actors for an already existing goal. In particular in the case of large, long-term projects in which many actors are involved, a project plan tends to have a function also as a vehicle for discussion and lobbying. It serves to sort out possible solutions to main planning issues and gain commitment from actors, which may be involved in the next planning stages. Thus, the level of detail that is shown already in an early stage in many comprehensive project plans may be deceptive, and may serve mainly to structure the discussion and persuade potential supporters or opponents of the project. Detailed plans may than in fact be elaborated at a lower scale for separate sub-projects, as happen with the design guidelines for the spin-off project at Schiekadeblok, around Rotterdam Central Station.

According to the researcher J.J. Trip, in the planning process of these projects, considerable attention is paid to *urban quality*. Project plans, designers, and developers picture an area based on the idea of the traditional street as the model of urban life with a diversity of functions, high-density and high-quality of public space and architecture. (Trip, 2008 p 399)

Furthermore the case of the planning evolution of Rotterdam Central District demonstrates the failure of large-scale master plan with high ambitions (as for Alsoop strategic vision) and the development of new procedures, aimed to design guidelines of architecture and urban planning based on a shared vision (mixone). In the new creative city and liveable city, the key words are phasing and participation processes.

Planning of the Zuidas in Amsterdam is based on a general scheme also, which is currently elaborated (and occasionally adjusted) in sub-project plans. Previous institutions, points of view and social patterns are locked in earlier stages of the policy process and affect present and future decision-making.

Furthermore, an iterative process may easily occur, as positions and competences of actors or groups of actors are often stable and insensitive to change for long periods. In this context the traditional role urban planning is disappearing, main producer of the Master plan. Now architects have to facilitate bottom up initiatives and alternative creative methods. The case of high-speed railways is the opportunity to rethink our profession and generating new tools for designing the shape of our cities and society.

Research projects on the topic of development process of HST station area (re) configurations aims to redefine and requalify the role of design, among planning and public government, in certain complexities and to examine the responsibilities of *alliances* and *partnerships* in confronting social challenges through city-making<sup>7</sup>.

<sup>7</sup> In 2012, the 5 th IABR in Rotterdam actively engages with City-Making and in doing so, it insists on the need to reformulate the relationship between planning, design and politics. The Biennial argues that current conditions offer an opportunity to reimagine the city through a multidisciplinary, integrated and proactive approach that combines updated planning strategies with new *alliances* grounded in specific knowledge of local conditions. The curators Brugmans, Declerck and Ovink argue: << If making city is what we have to do, we must really go about it differently, by building strong alliances, by formulating an urban agenda, and by putting design first. If we insist on a good use of temporary standstill we can empower *short-term* acting (projects) with *long-term* perspectives (idea, vision) and make a new urban agenda. >> (Buijs et al. 2010 p 351)



In general in the development process, the design proposals themselves will start as concept sketch, getting progressively more detailed as the development proposal increases in certainty and ultimately in sufficient detail for the development to be built. In complex interventions, defined by long-term and multiple ambitions – and clients - the role of the urban designer into the development process is relevant, mainly helping to formulate visions and translating them into spatial solutions. The *Table 2* shows the key activities of the urban designers, both acting for developers and for public sector. It becomes clear how the role of designers could reach higher level of complexity when dealing with multiple developers and stakeholders, such as in the case of HST station area (re) development projects.

*Table 2. Development process and urban designers (taken from Carmona et al., 2010)*

STAGE	URBAN DESIGNER ACTIVITIES	
	Acting for developer	Acting for public sector
Development pressure and prospects	<ul style="list-style-type: none"> <li>- Spots opportunity</li> <li>- Identify suitable site</li> <li>- Provides vision</li> <li>- Prepare <i>project brief</i> and <i>masterplan</i></li> </ul>	<ul style="list-style-type: none"> <li>- Prepares planning policy framework</li> <li>- Vision</li> <li>- Influences <i>development brief</i> for the site</li> </ul>
Development Feasibility	<ul style="list-style-type: none"> <li>- Feasibility study</li> <li>- Design proposals</li> <li>- Negotiate planning authority</li> </ul>	
Implementation	<ul style="list-style-type: none"> <li>- Scheme quality may seal commitment with founders</li> </ul>	<ul style="list-style-type: none"> <li>- Influences management of development</li> </ul>

### 3.1 Research Potentialities

At the time when main economy of cities shifted from the industrial to the tertiary sector, the culture of *making cities* shifted from zoning and masterplanning (control) to strategic planning through the insertion of projects in a city's landscape (active intervention), i.e. the case of HST station area (re) developments. Furthermore the traditional instruments of planning and architecture at hand no longer produce and idea of 'the city'. In this context both design professionals and policy makers no longer know their role and aim for objectives and target driven by a longer term vision. The planning of cities has become an ongoing process of negotiation without a real aim or target, at the same time it tends to be understood as 'the accomodation of each actors' individual project'. (Buijs et al. 2010)

Furthermore *briefing* is a process of client and users reaching decision, which are then communicated to the design team through briefs. It involves continuous communication between the user and the design team each of whom have different expectations. Good design arises from well-informed client who are able to communicate their needs to the design team. (Worthington and Blyth, 2010) Therefore the DESIGN as a *tool* is developed through a process of collective discussions at design team meetings where info and ideas are shared using sketches, photographs, models, literature and visits to buildings as a means of communication, in order to get information, to get a decision and to share understanding. The creation of *alliances* and the use of *design* as a tool (for the definition of the project brief and for communication activities) are key elements of drawing up contemporary spatial visions. The HST station area (re) development projects as case studies demonstrate how the Dutch approach to planning is proactive. It means listening to and communicating with all stakeholders, who each represent different challenges and tasks and who share the desire to make a difference. It also means looking to the future, to prepare for future challenges and opportunities. Planning is about being prepared – because solutions take time and require consistent *long-term* policy and *implementation*.

Looking at other worldwide perspective, the Dutch *Integrated Design approach* is relatively new. With the phenomenon of the high-speed-rail infrastructural strategy and the increasing world population, reflections on the role of designer is central in the contemporary urban change processes. Design procedure helps defining the *project brief* for a project or study area, the scope and the opportunities for the future planning and construction of an High-Speed Train Station and the development of its urban surroundings.

A recent interesting call for research proposal, commissioned by the Dutch research Fund and the Beijing Municipal Commission of Urban Planning (Stimularings fonds, July 2014), aims to the exchange of design experiences on the Chinese more *research* in their design methods and the Dutch more *design* in their research method, for a new spatial vision of the high speed train Qinghe Station, in Beijing.

Main objectives of the call for proposal are:

- Identify the opportunities for a project area so that they won't be overlooked and lost in the process;
- To define the boundaries of the spatial, societal, environmental and financial feasibility;
- To formulate a vision for a project, which helps to initiate discussion and debate;

- To anticipate on possible long-term developments.

According to this call 'the participatory planning process with multiple stakeholders and alliances in planning, design, finance and execution may guarantee not only a vivid debate, but also solid, adaptive and profitable design solutions that can be implemented in reality'.

Therefore in the field of academic and professional research environment, forthcoming projects and reflections might attempt to investigate the contribution of design role in the definition of the *project brief*, the understanding of the impact on urban *context* and the influences and roles of public and private *stakeholders*; the *project process* and the modality for *collaborations* with all stakeholders.

Design visualizes the different spatial scenarios for abstract choices or possibilities in policy. By drawings, maps, models, diagrams and infographics, a possible future environment can be imagined. This helps communication between planners, policy makers and designers and communication with stakeholders, users and citizens. The research question is: what kind of tools the designers need to adopt during their communication moments.

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**Manuela TRIGGIANESE:** Graduated cum laude in Architecture at the University of Naples, she is currently PhD candidate at TU Delft, contributing to the research activities of the Chair Complex Projects, with her promoter Prof.ir. Kees Kaan. She has been participating to the international doctorate program Villard d' Honnecourt coordinated by the Faculty of Architecture in Venice (IUAV), and in collaboration with Madrid (ETSAM, Escuela técnica superior de arquitectura) and Paris (Ecole Nationale Supérieure d'Architecture de Paris-Belleville). She is UKNA fellow - Urban Knowledge Network Asia – and she will conduct research activities at Beijing University of Technology (CAUP) in 2015.