

Structure Summary Report

Title

Full title: "Cluster flats for structurally and socially adaptable housing concepts of resilient urban development".

Occasion/ Starting Position

kurze Beschreibung des Problems und des Lösungsansatzes
max. 450 Zeichen (mit Leerzeichen)

Demographic and social changes affect housing structures. The increase of one-person households is particularly striking (GdW 2018). Shrinking inner-city reserves of building areas and rising construction costs due to the economic situation are affecting the housing market (BBSR 2017). New forms of housing such as cluster housing and housing typologies like cluster flats can react to the resulting changes in demand and needs for living space.

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Subject of the research project

Beschreibung der Arbeitsschritte und des Lösungswegs
max. 4.300 Zeichen (mit Leerzeichen)

In a multi-stage working process, the planning, structural-constructive, residential-sociological, economic and legal dimensions were examined. Alternating between inductive and deductive procedural steps, this approach can be assigned to the social science methodology of Grounded Theory.

The research process involved four phases:

Phase 1: Development of selection and evaluation criteria;

Phase 2: Document analysis and stocktaking;

Phase 3: Case study analysis;

Phase 4: Evaluation, conclusions and derivation of recommendations.

Cluster flats are known in the professional-level debate through some pilot projects. However, it is not known how many cluster flats actually exist in Germany, Austria and Switzerland (DE - AT - CH). The geographical focus of the survey on cluster flats is based on the historical genesis of the phenomenon of cluster flats in Switzerland, which is intensively discussed in German-speaking regions. By focusing on the German-speaking area, the research project also meets the difficulty of international comparisons resulting from conceptual differences. And even in this already delimited international area, different framework conditions from building law, cost determination and funding modalities proved to be hurdles for a comparative evaluation.

In the first instance, it was necessary to define the phenomenon in order to investigate cluster flats. The existing definitions had to be specified in more detail before the essential characteristics could be worked out from the range of different variants. Additionally, to the criteria "private units with bathroom and kitchen if necessary" as well as "communally used rooms" two further essential structural and social criteria are considered: integral development through communal areas and self-organized communal living.

Cluster flats were identified by evaluating various sources (scientific publications and research papers, online research, interviews with experts and own observations). For the purpose of systematic and comparative recording, 67 projects were surveyed and evaluated with regard to the research project-specific definition of cluster flats. The results of the stocktaking are 33 projects with cluster flats in DE - AT - CH, for which 29 project profiles with all the information available in the specialist literature or on the Internet were compiled.

The selection criteria were derived from the characteristics recorded in the inventory. The following criteria were used for the evaluation:

- Date of completion;
- New building / existing building;
- Building and floor plan typology;
- Size of the cluster flat and size of the private residential units;

- Ownership structure;
- Location;
- Awareness.

For each case study, plans and building data were evaluated, expert interviews were conducted with project managers and on-site visits were carried out. Furthermore, an online survey was carried out with the residents of the cluster flats between 11 June and 9 September 2018, with a response rate of 42% (54 from 122 participants).

The evaluation was based on the following criteria

- Project development, financing and participation;
- Spatial qualities and structural implementation;
- Organisation of everyday life and living together;
- Neighbourhood and urban quarter.

The different quality of the data and information on manufacturing and operating costs made comparative evaluation in these evaluation criteria difficult.

An important part of the research was the exchange with practical partners from the housing industry and a social science research advisory board. This exchange took place in project-accompanying workshops, in the context of specialized meetings or in expert discussions. Through the close feedback of the research to the practice, a transdisciplinary research was aimed at, in which the practice partners were informed at the same time about new housing economic tendencies by a collaborative knowledge production.

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Conclusion

Beschreibung der geplanten Ziele und der erreichten Ergebnisse
max. 700 Zeichen (mit Leerzeichen)

The aim of the research was to find out whether new housing typologies such as cluster housing make a significant contribution to resilient urban development, how this contribution can be described and evaluated empirically and methodically, and under which conditions they would be possible on a larger scale. These objectives led to three central research questions:

1. the special qualities of cluster flats (structural, social, energetic, legal and economic);
2. the contribution to resilient urban development;
3. the conditions of transferability and scaling.

With the comparison of cluster flats in eight case studies, the typical features were systematically recorded and the conditions for realization were named. The discussion of resilience-specific qualities shows that cluster housing and cluster flats have central characteristics of resilient systems.

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Key data

Short title: Cluster Housing (Cluster-Wohnen)

Researchers/ Project management:
Hochschule für Technik und Wirtschaft Berlin (HTW Berlin)
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Fachhochschule Potsdam (FHP)
Institut für angewandte Forschung Urbane Zukunft
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Total costs: 335.935,00 €

Share of federal subsidy: 233.810,00 €

Project duration: 27 months

Illustrations:

5 - 7 Druckbare Bilddaten als **eigene Datei** (*.tif, *.bmp, ...) mit der Auflösung von mind. 300 dpi in der Abbildungsgröße (z.B. Breite 10 - 20cm). Bilder frei von Rechten Dritter.

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Fig 1_Work Phases and Methods

BU: Work Phases and Methods

Fig 2_Schematic Outlines

BU: Schematic Outlines

Fig 3_Table_Case studies

BU: Case studies and fulfilment of selection criteria

Fig 4_Project Objectives

BU: Objectives pursued with Cluster Housing (Cluster-Wohnen)