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roles of VSNX ✓ / Vserosiisky Sovet Narodnago Hozyistva ✓
(High Council of National Economy) and PSP ✓ / Promstroj Proekt ✓
(Industrial Construction Project) in relation to building construction?

VSNX determined policy matters regarding industrial construction. There was an Industrial Building Branch in VSNX, which in turn was divided into functional sections, that is for example chemical plants, machine tool plants and so forth. However, VSNX long ago organized the Commissariat of Heavy Industry which took over policy matters in connection with industrial construction and design. PSP has a branch in every large city which deals with industrial construction projects in that city.

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[redacted] industrial building methods [redacted]

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In theory they were standardized by VSIX but in practice this was not the case. Actually each large government organization did its own construction work and usually provided its own construction materials often produced in its own shops. Therefore, the building materials were not standardized and hence construction practice and methods could not be standardized. As an illustration, let us assume that it was decided to build a tractor plant in Chelyabinsk. The building plans would be drawn in Moscow. But because of the great distances involved it would not be practicable to supply the building materials from Moscow or the Ukraine. Instead shops would be set up in Chelyabinsk to turn out materials locally, which might or might not conform to Moscow standards. Hence the construction plans could not necessarily be followed. This actually happened when Stalin decided to move industry from the Ukraine to the Urals. Normally if such a major movement of industry were to be made, shops and manufacturing plants to supply materials would be set up before any attempt to rebuild the industry in its new location. However, Stalin's orders were that the move was to be made at once. Hence construction work was started simultaneously with setting up the material supply shops. This naturally resulted in poor materials and a great deal of waste. The system of supplying materials locally also results in the necessity of using far more engineers and technicians in the production of construction materials than in the US, and with less satisfactory results.

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[redacted] all of the metallurgical plants and machine tool shops in the Ukraine, complete with their personnel, were moved to the Urals during the war. [redacted]

[redacted] the only plants remaining in Kiev were those which it had been physically impossible to evacuate. [redacted] none of the evacuated plants had returned and that very little new industrial construction had taken place with the result that the Ukraine can no longer be considered an industrial center.

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[redacted] standardized construction methods do not exist in fact.

[redacted] in a very broad sense there is standardization in that, under the influence of Albert Kahn and Co, steel frame reinforced concrete construction is standard for all industrial buildings. The new plants in the Urals and Turkestan are undoubtedly of such construction.

[redacted] An attempt was made to standardize industrial design on functional lines, this remained an unattained goal.

In non-industrial design, housing for example, some progress was made in standardizing interior design in the sense of providing certain norms. This did not apply, however, to exterior design at all, or to floor planning insofar as the arrangement of rooms was concerned. Certain building materials and items were standardized, such as doors, windows and frames, and flooring. The architect of a housing project did his best to provide the maximum comfort and convenience for the occupant from the space at his disposal and arranged his floor plans to give the best results in the way of light, air and outlook. In the early housing projects the norm per person was somewhat smaller; latterly six square meters per person was standard and rooms were from 3 to 3.20 meters in height. Housing projects in the USSR are usually larger buildings than in the US and contain from 40 to 100

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units of 2,3,4 or exceptionally 5 rooms each. Two room units made up the majority. a 2-room unit 2 rooms for sleeping or living purposes plus a vestibule, closet, kitchen and bathroom or toilet. This, however, was all purely theoretical. The building would be erected according to plan but the 2-room unit instead of being occupied by one family would be divided between two families, both probably with children. Doors between rooms would be boarded up and bath rooms used for storage. Hence the official norm of living space was seldom achieved.

Housing plans of large organizations aim to provide better accommodation than pre-existing old houses. However, both the materials and the workmanship of the new buildings are inferior to the old. Hence there is little to choose.

Each city has its APU (Architecture Planning Commission) which controls construction in the city. If an organization proposes a housing project, the APU assigns the ground space and specifies the size and design of the building. Quite frequently several organizations will join together in one housing project for the joint use of their employees.

Brick weight bearing walls, with timber roof beams, floor joists and floors. For a four story building or lower the main walls are 2 bricks thick or about 50 cm. If the building is over four stories the walls will be 2 1/2 bricks or more in thickness depending on height. Every new apartment house is required to have beneath it a bomb shelter. The ground floor of the building that is the roof of the shelter must be constructed of reinforced concrete backed by sheet steel. If the building is five stories or more in height the ceiling over the top floor must be of the same construction.

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Buildings of less than 40 meters in length do not have firewalls; if over 40 meters in length they do at approximately 40 meter intervals. Earthquakes are unusual and no special provisions are made for them. In case of a "near-miss" by a bomb the blast might collapse the brick walls but in this case reliance is had on the reinforced concrete and steel ground floor to support the debris.

The larger organizations use their own construction staffs. The smaller ones, lacking qualified personnel, apply to the local construction Trest (trust), in Kiev Industroy Trest, to do it for them, the Trest operating much as does a building contractor in the US. The same is true of industrial installation work. For example, the Kiev Energo attempted itself to install the machinery in the Kiev Rayon Electric Station. It found that it was not able to handle the job and so applied to the Southern Energo Montage which specialized in such work and did the work for Kiev Energo.

One difficulty of all civilian construction work is that military construction always has priority. Thus civilian work may be held up at any time if it conflicts with military work.

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There is an official union for each class of labor, for example carpenters, masons, bricklayers, which are supposed to supply labor but seldom have any men available. The main sources of construction labor are the peasants on the Kolkhoz. Peasants from the same area become accustomed to working together and form a group or labor gang, the foreman of which is known as a "brigadier". Each organization which does construction work has a chief in charge of construction. The chief is always a party man but infrequently is a professional engineer. In large organizations the chief has a deputy who is a professional man but usually is not a party member, because if he were a party man he would be chief. The deputy has under him one or more assistants called Prorab, who are the equivalents of works superintendents and whose duties include recruiting construction labor. The Prorab keeps in close touch with the labor market and with brigadiers and when he hears, for example, that a gang of bricklayers are available in a certain Kolkhoz he reports the fact to the construction chief. The construction chief then requisitions for the men on the rayon party committee, whose secretary passes the requisition on to the People's Commissariat of Sovkhoz /Narkomsovkhoz/ of the republic. This Commissariat controls both the Sovkhoz and the Kolkhoz and it in turn calls on the Kolkhoz concerned to supply the men. There is no trouble with the men because they are always delighted to get off the Kolkhoz and get a paid job.

they are too well satisfied with being at work and in the second place the USSR is a prison and one does what one is told.

During the course of construction, work in progress is inspected by both an inspector of the organization doing the work and by an APU inspector to see that specifications are being followed. If for any reason the specifications cannot be followed, the APU inspector must execute an official report stating the facts and the reason.

Completed work is subject to inspection and approval by a special government commission. The commission is made up of professional men such as engineers and physicians plus perhaps a specialist on the type of building concerned.

Inspections were rigid

Some experiments with pre-fabricated small buildings were made, but they were not successful. The usual experience with pre-fabricated houses was that the construction was so bad that the house had to be re-built.

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