

Operating Supervising Surveyors – Two-year Experience of an Unusual Governmental Enterprise

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Key words: cadastral practice, mutation plan, supervising surveyor, governmental- and private sector cooperation

SUMMARY

The land registration method in Israel is based on the Torrens system. The state (through the service of the Survey of Israel, SOI) is responsible for the definition of the land parcel boundaries as registered in the Land Registry Office.

The land administration practice in Israel involves both the governmental and private sectors. One of the most important tasks of the private surveyors is the preparation of mutation plans, which serve as the required technical documentation for any change in land registration.

According to the existing law, each mutation plan has to be carefully checked and approved by SOI before starting with its registration procedure. SOI should complete increasing supervising tasks with permanently decreasing professional personnel. These opposite trends result in queue of mutation plans waiting for the beginning of their check.

According to the survey regulations, the Director General of SOI authorized private surveyors - by delegation of power - to execute the supervision of mutation plans prepared by other licensed surveyors. SOI keeps the right of the final approval to itself, but also commits itself to complete it within 21 working days.

Currently, supervising surveyors check some 35% of the mutation plans. The results clearly prove that the integration of governmental and private professional knowledge and the mutual willingness for cooperation contribute essentially to a better cadastral practice.

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1. THE CADASTRAL SYSTEM AND PRACTICE IN ISRAEL

The land registration method in Israel is based on the Torrens system (registration of titles). The state (through the services of the Survey of Israel, SOI) is responsible for the description of the land parcel boundaries as registered in the Land Registry Office (Forrai et al, 2004).

SOI is the top professional geodetic and surveying authority in the country, setting standards, initiating legislations, licensing surveyors, supporting and initiating research and development, actively managing and maintaining the national geodetic infrastructure, the national GIS, and is responsible for mapping, topographical and cadastral. SOI supervises, confirms, collects and maintains all cadastral mapping.

The land administration practice in Israel involves both the governmental and private sectors. Although the part of the governmental authorities is relatively dominant, there is a growing trend of deeper involvement of the private resources in the process. This tendency is based on different backgrounds and motivations, some derived from ideologies and some based on economic considerations.

The private sector (which is composed of some 500 active licensed surveyors) carries out a great variety of tasks. One of the most important of them is the preparation of mutation plans, which serve as required technical documentation of any change in land registration.

2. THE INCREASING TASK AND THE DECREESING GOVERNMENTAL PERSONELL

According to the existing law, each mutation plan prepared by private surveyor, has to be carefully checked and approved by SOI before starting with its registration procedure. As a tendency, the number of mutation plans to be approved is growing, the governmental personnel is being reduced.

The number of mutation plans to be approved shows an extremely increasing trend during the last years: some 1200 in 2003, 1600 in 2004, the same number in 2005 and a slightly more expected in 2006.

As a contrast to the increasing challenge, the need of "self-reducing" the governmental sector appears (as in many developed countries) also in Israel. In general, a rate of 1-2% cut per year of the governmental personnel is widely applied and accepted as a standard. (This seemingly minor rate of yearly reduction caused the drop of the employees of the Survey of Israel from 450 in 1979 to 270 in 2004.) The rate of the cut has been increased during the last

years. It means that SOI should complete increasing supervising tasks, with a permanently decreasing professional personnel (see figure 1.).

The “self-reducing” of the personnel by governments is a long term, international trend. As a European example, the data of the gradually reduced Austrian BEV are shown (see figure 2.).

These opposite trends result in a long (more than half a year) queue of mutation plans waiting for the beginning of their check by the Survey. The formation of a queue forced SOI to face and to deal with it.

3. THE “FIRST ROUND” TO OPERATING SUPERVISING SURVEYORS

In the first time, supervising surveyors were nominated in Israel in 1994. The idea was initiated and realized as a result of administrative governmental pressure, aiming the acceleration of the supervising and confirming mutation plans. At that time, the right of SOI Director General to authorize private surveyors as supervising surveyors was not anchored in the surveying and mapping regulations. Furthermore, the 13 supervising surveyors were nominated on the base of SOI satisfaction with former professional record, which was not adequately documented.

In fact, only two of the 13 supervising surveyors became practically active and successful, completing some 5-10 percent of the full yearly supervising task. An appeal to court, assailing the nomination method, served as a “catalyser” to finish their activity in 2001. Anyway, their operation was significant and important, as a precedent.

4. A GOVERNMENTAL SELF-INVESTIGATION

A successful governmental self-investigation committee formed of representatives of the relevant governmental bodies and offices set a number of recommendations for accelerating the whole procedure of land registration. One of them was the nomination of supervising surveyors.

5. REGULATIONS – 1998

In 1998, updated surveying and mapping regulations came into operation. In these regulations, the right of SOI Director General to authorize private surveyors - by delegation of power - to execute supervision of mutation plans is legally stated. Some basic (mainly ethical) restrictions regarding supervising surveyor’s activity are also included in the 1998 regulations.

6. THE “SECOND ROUND”

In 2003, as a result of the background described above, a decision was made by the Survey, to renew the operation of supervising surveyors.

The most basic principles of operating supervisor surveyors had been concluded as follows:

- The choice of the supervising surveyors will be carried out by a bid, focusing on qualitative professional data. No competition on fee will be included in the bid.
- Supervising surveyors will check mutation plans and instruct the private surveyors who made them to carry out necessary corrections, completions, etc. Correct mutation plans will be recommended by a supervising surveyor to SOI to be confirmed as “approved for registration”.
- SOI keeps the right of the final approval to itself, but also commits itself to complete it within 21 working days.
- According to the Regulations - 1998, the supervising surveyor is prohibited to check mutation plans, which had been prepared by himself or are based on plans which had been prepared by himself.

Regarding the economy aspects, a free market model was applied. The contract and the financial conditions are negotiable between the supervisor surveyor and his client. The state does not barge into the business. Client can choose between supervising surveyors, or, alternatively, can order the supervising work from the Survey. It means, that on one hand there is a competition between the supervising surveyors themselves, and on the other hand they should take the operation of SOI into account.

The bid was styled in a very "structural" manner. All the conditions and terms of the bid and of the future contract were included and specified. The mechanism of score and gradation were open for the competitors and were also clearly structured.

As the delegation of a significant governmental power was the subject of the bid, SOI focused on the "quality" of the future supervising surveyors. Of course, the definition and the justification of "quality" are not very simple. The quality components in the bid were based on series of requirements, some of them objective (as minimal years of relevant, practical experience, quantity and complexity of plans completed by the candidate, average number of the necessary corrections of formerly approved plans, etc.). Other data reflected the “subjective” appreciation of the nominee by SOI professionals, which was effected by objective criteria (number of plans examined by the referee).

SOI had emphasized that the nomination was a commitment that sets a duty upon the supervising surveyor rather than a privilege. The supervising surveyor must fulfill all the terms of the contract and give preference to fulfilling his duties as a supervising surveyor. A special consideration was taken regarding the issue of "conflict of interests". As special governmental power and status were part of the nomination, it is the interest of both SOI and the public to prevent any abusing of these “privileges”. A system of declarations and reports was fixed in order to avoid any case of misuse. A very detailed and tailored insurance stipulation was prepared to ensure a source of pay for a case of damage as a result of a mistake or an error done by the supervising surveyor.

17 applications have been received and carefully evaluated by the competent bid committee. Seven of them reached the tentatively set threshold value and were passed to the SOI Director General advising their nomination. The director general, making his legitimate considerations, decided to move the threshold slightly down, and approved 10 winners of the competition.

After signing the contracts between the Survey and each of the ten winners, nominations have been presented to them by the Director General in May 2004. In that moment, in a certain sense, a new era of cadastral practice started in Israel: prominent private sector representatives became involved and integrated, by an established manner, in a formerly pure governmental, statutory activity.

7. THE FIRST YEAR OF OPERATION

Following the nomination of ten supervising surveyors, their contact data have been advertised to public in detail via the website of the survey of Israel (see http://www.mapi.gov.il/page?id=cadastre/criticizing_surveyors/manager, in Hebrew). Furthermore, licensed surveyors and the biggest governmental clients have been informed by a letter of SOI Director General regarding the new option to check mutation plans by supervising surveyors.

The first mutation plans arrived to supervising surveyors' care after a few months, and passed by them to SOI final check and confirmation a few months later.

Surveyors (or their clients) have to pay a fee to SOI for the final supervising and approval of mutation plans. The sum is calculated according to the effective costs of related field and office activity invested. The final cost is unknown, and basically depends on the quality of the mutation plan to be checked.

It is not the case regarding plans, which are delivered to SOI by the supervising surveyors with their preliminary confirmation. The maximum fee to be paid to SOI is known beforehand, allowing the supervising surveyor to take it in consideration in his economic pre-calculations. The maximum fee depends on the category of a plan: small, medium or large. For exceptional (very large) plans the fee is negotiable (in advance) between the supervising surveyor and SOI.

The supervising surveyor is committed to deliver correct plans only. Therefore, SOI supervisor has a limited number of working hours to be invested in the final check and approval. If SOI supervisor distrusts the correctness of the plan, he or she can extend the supervision. If the plan was correct ("the supervising surveyor was right"), he will not pay more than agreed, and SOI will bear the expenses. If the plan was incorrect, the supervising surveyor should correct it, will cover all the expenses, will lose the privilege to receive final approval within 21 working days, and will bear any other consequences according to the contract.

At the beginning, the cooperation between supervising surveyors and their SOI supervisors was characterized by some excess of “mutual carefulness”. But the work was done. A year after the nominations (in May 2005), the supervision of nearly 400 plans had been ordered from supervising surveyors, and some 160 of them were finally approved by the Survey. An anonym poll, run by the authors in May 2005 shows, that “mutual carefulness” was gradually replaced by “mutual appreciation”, and the confidence of “both sides” in the necessity of this joint project became stronger. Two *facts* contributed to the positive tendency: one is that SOI definitely fulfilled his commitment regarding the 21 workdays deadline; the second is, that the number of incorrect plans delivered by the supervising surveyors was very low. Both sides took the job seriously.

Two basic, negative tendencies were also identified at the end of the first year. The distribution of the plans to be supervised, ordered from supervising surveyors, was very inhomogeneous. (Three of the supervising surveyors had even less than 10 plans ordered.) The other problem is, that the rate of the orders from supervising surveyors clearly exceeded the rate of their supervising output. At that time, the average time of supervising a plan by an “average supervising surveyor” was about half a year, whilst SOI needs a year for completing the same task.

The results, in general, were encouraging. Therefore, in late summer of 2005 SOI decided to extend the number of the supervising surveyors.

8. THE “THIRD ROUND”

The basic principles of the “third round” were very similar to those, which were applied in second one. As the common feeling of the working team in SOI was that the prior conditions were too rigid, the terms of the new bid were made slightly easier.

As a result of the new bid, 7 other supervising surveyors were chosen and nominated in January 2006. (The average score of this group was slightly lower than it was in the previous round.)

As it often happens, the third round of the bid found its way to the court. Two of the candidates who were not chosen had filed a petition, in order to disqualify the results of the bid. As the injunction that was asked for, was not granted by the court and few other court decisions *clearly* accepted the standpoint of SOI, it seems there will be no judicial obstacle to the further implementation of the project.

9. THE CURRENT STATUS OF SUPERVISING SURVEYORS` PRODUCTION

During the two years following the nominations in 2004, the investigations of more than 1000 plans have been ordered at supervising surveyors. Nearly 500 of them have been finally approved by the Survey. This considerable result has been achieved by the first ten supervising surveyors. The “new” seven ones just start their production in present months.

The general production of supervising surveyors since 2004 is illustrated in figure 3. One can see that – along the nice success – a basic negative tendency, identified after the first year of the operation, has been increased: the rate of the orders from supervising surveyors strongly exceeds the rate of their supervising output. The average time of supervising a plan by an “average supervising surveyor” is about ten months today, approaching the typical time of one year (or slightly more), which is necessary for SOI for completing the same task. Furthermore, the distribution of the plans to be supervised, ordered from individual supervising surveyors, remained very inhomogeneous (see figure 4.).

10. THE “PSYCHOLOGY” OF THE SUPERVISING SURVESORS` PROJECT

The main dramatic change for the supervising surveyors is the inevitable change of positions. Once the case was "SOI against surveyors", the supervisor as opposed to the supervisees, the authority compared with the self-employed. After their appointment the supervising surveyors are facing new reality, different views and dilemmas. They check the mutation plans made by their colleagues (sometimes friends). They get new awareness to the standards of professional community. They have to face their equals and correct their mistakes. They have to deal with delicate issues of gross negligence that occurs from bad work and handle the conflicting loyalties.

A certain part of the private surveyors definitely refuses to be checked by a supervising surveyor, on a clear base of reputation (“why is he worth more than me?”) These surveyors consequently and exclusively continue to be checked by the Survey.

Another psychological process is the need to SOI and supervising surveyors to work together. Although the supervising surveyor is independent and autonomous while operating his judgment, in the process he needs to be in close contacts with SOI. He needs to get data, seek for relevant and unique information and do research, he has a duty to give reports to SOI and so on. On the other hand, SOI's employees have to adjust themselves to "new colleagues" that are old acquaintances, and in some cases have a history and past relations. It is quite safe to mention that surprisingly this part of the experience is relatively successful. The professional behavior and will to contribute to the success of the project had made SOI's employees good partners to the supervising surveyors. Both sides conclude with satisfaction that the experience had improved their relationship. We are convinced that both sides had their benefits from that improvement.

No doubt that acting as a supervising surveyor is more than a job. In a certain meaning it is a *mission* - a difficult mission. It seems clear, that the personality of an individual supervising surveyor plays a significant role in his professional and economic success or failure.

11. ECONOMIC ASPECTS OF THE PROJECT

The "free market" model chosen for the project reflects a well-based concept regarding the position of the government in the economic field. A government should not participate in the market as a "player" but must set the rules (fair and equal ones), make sure that all the

relevant information is available to the players and "let the market work". Both SOI and the supervising surveyors had to adjust themselves to that concept. Both had their share of doubts, conflicts and objections.

A very preliminary attempt of supervising surveyors to organize an "adjusted price" was obstructed by SOI, since it was forbidden by the terms of the contract and by state law.

One problem worth mentioning is the "unfair" (?) competition between SOI and the supervising surveyors. Apparently the prices of the supervising surveyors are higher than SOI tariff. The more time the approval of a plan by a supervising surveyor lasts, the less advantage over SOI will be achieved, and the component of the price becomes significant.

12. FUTURE: DILEMMAS AND EXPECTATIONS

Since the contracts with the supervising surveyors were limited to 3 years, SOI is demanded to prepare the next round of the bid. There are many questions rising to be discussed and solved before. Will the difference in the quantities done by individual supervising surveyors be taken in consideration and how? Is there a real need to a further increase of the number of supervising surveyors? How can we give significance to the accumulating experience of the existing supervising surveyors, and yet, give a fair chance to "newcomers"?

All these dilemmas and some more will be reflected in the form and conditions of the next round. We hope that we'll have the ability to balance the conflicting considerations in an optimal way.

The achieved results of this unusual governmental experience are not bad, but final success is still to be proven. The average, comprehensive time of the supervision task should be significantly reduced, while keeping its quality on permanently high level. Declaration of a full success will be confident just after we achieve these ambitious goals.

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BIOGRAPHICAL NOTES

Dr. Joseph Forrai was awarded M.Sc.(1974) and D.Sc.(1980) degrees at Technical University of Budapest, Hungary. Dr. Forrai was Lecturer and Senior Lecturer at TUBudapest, Tel Aviv University, Israel Institute of Technology (Technion) and Bar Ilan University (Tel Aviv) since 1976. Appointments at the Survey of Israel: Chief of Research Division (1987-1992); Head of Photogrammetry Department (1989-1993); Deputy Director General (1993-1994), Chief Scientist (1995-2003), Deputy Director General for cadastre (since 2003). Professional and research background (partial): crustal movement detection; photogrammetric data acquisition (national GIS topographic data base); permanent GPS station network; GPS support for geodynamics; improvement of national cadastral practice. Memberships of the Israeli Society of Photogrammetry and Remote Sensing (president between 1995-2001); Association of Licensed Surveyors in Israel (responsible for FIG relations); Israeli Cartographic Society.

Advocate Gili Kirschner was awarded LLB (1989) and LLM (1996) degrees at Hebrew University, Mount Scopus, Jerusalem. Between 1990 and 1998 worked with several law offices in Israel, engaged with supervision and management of acquisition and registration of dwellings for social residence, legal advice to urban renewal and restoration projects and to real estate developers. Since 1998 fills the legal advisor's position at the Survey of Israel. Member of the Israeli Bar, the Israeli Society of Photogrammetry and Remote Sensing and the Israeli Cartographic Society

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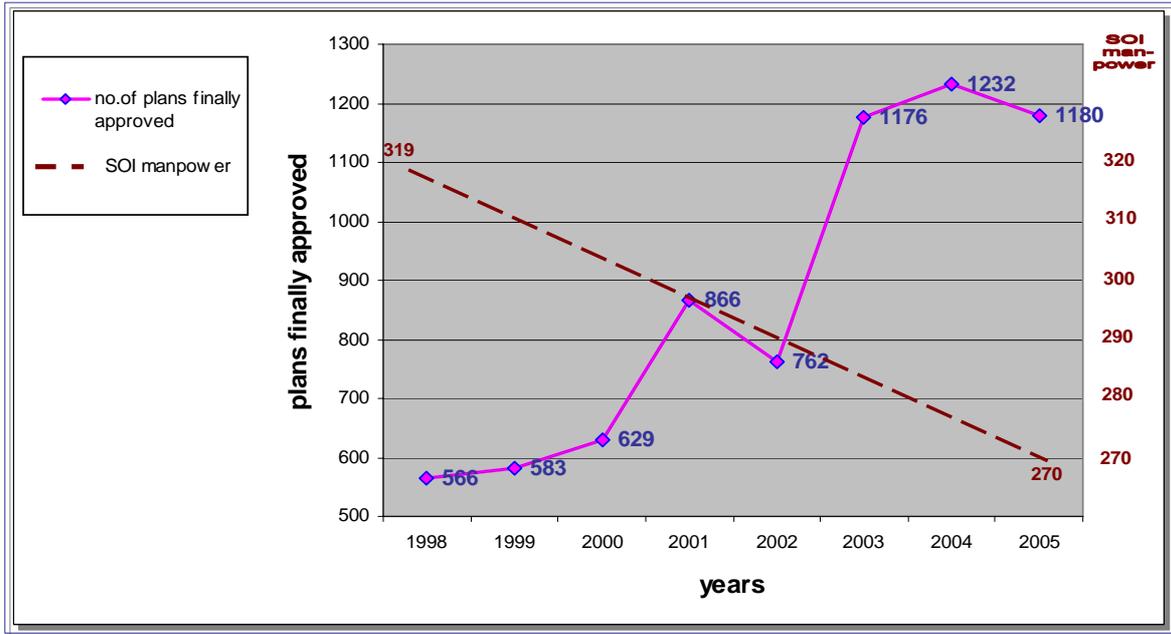


Figure 1 . Increasing supervising tasks to be carried out by decreasing professional personnel

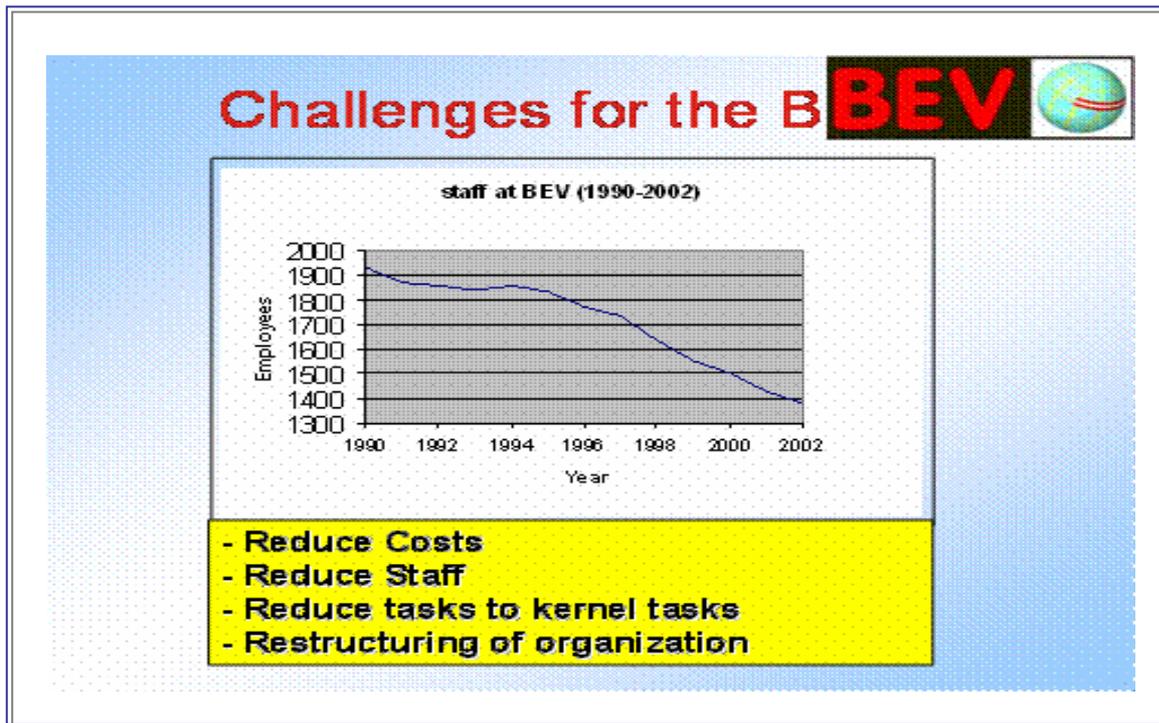


Figure 2. Decreasing manpower at BEV, Austria. With the courtesy of Mr. Gerhard

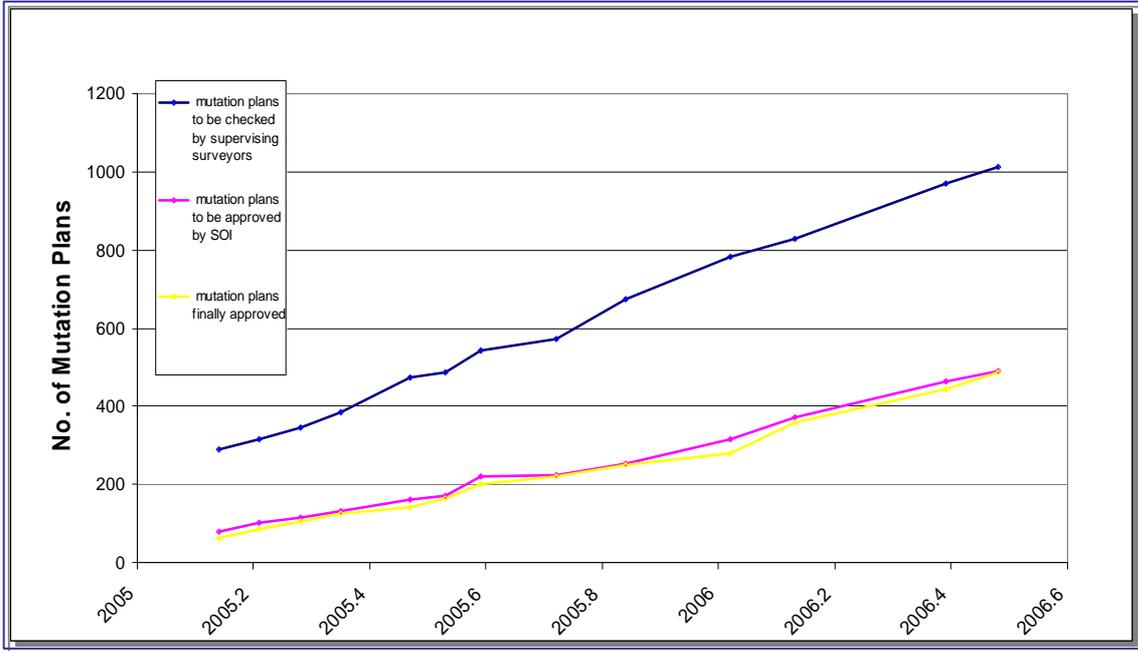


Figure 3. Supervision of mutation plans completed by supervising surveyors

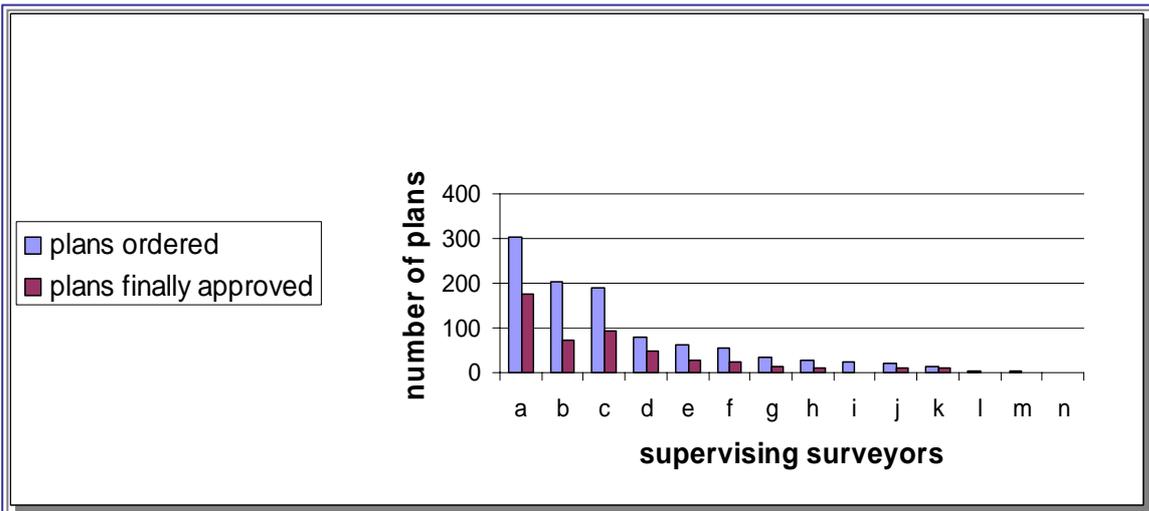


Figure 4. Distribution of plans ordered / checked by supervising surveyors (June 2006)