

Introducing Supervising Surveyors – Five-year Experience of an Unusual Governmental Enterprise

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

SUMMARY

The land registration method in Israel is based on the Torrens principles. The state (through the services 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.

SOI sought the solution to the problem of the growing queue by an innovation in government agency activity – the delegation of power to private licensed surveyors, to execute the supervision of mutation plans prepared by other licensed surveyors. SOI retains the right of the final approval to itself, but also commits itself to complete it within 21 working days.

SOI and supervising surveyors are about to finish the first five-year long cycle of their cooperation. According to the decision of the Survey, *a new round of nominations will be completed*, attempting to improve the general level of the project by means of drawing a lesson from the five year long experience.

Currently, supervising surveyors check some 30% of the mutation plans. The results prove that the integration of governmental and private professional knowledge and the mutual willingness for cooperation contribute considerably to a better cadastral practice.

This paper follows the structure of the previous one presented at XXIII FIG Congress in Munich (Forrai and Kirschner, 2006), as a primary report on the first two-year experience of operating supervising surveyors. Certain, relevant parts of that publication are adapted in the present paper.

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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 (including current geodetic datum based on permanent NNSS stations network), 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 still 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 600 active licensed surveyors) carries out a great variety of tasks, amongst them geodetic control network densification, engineering measurements, topography, photogrammetry, GIS related updating and – particularly – cadastral measurement and mapping. One of the most important of the cadastral tasks is the preparation of mutation plans, which serve as required technical documentation for any change in land registration.

2. THE INCREASING TASK AND THE DECREASING 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 permanent tendency of the past decades, the number of mutation plans to be approved is growing, the governmental personnel is being reduced.

Until the year of 2000, the number of mutation plans to be approved was significantly less than 1000 per year. The yearly number of mutation plans to be approved shows an increasing trend and between the years 2003 – 2008 varies between 1200 and 1600.

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 in the number of the employees of the Survey of Israel from 450 in 1979 to 250 in 2008.) The rate of the cut has even been increased during the last years. It means that SOI should complete increasing supervising tasks, with 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 personnel of the Austrian BEV can be considered (Forrai and Kirschner, 2006).

These opposite trends result in a long (in 2004 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 IDEA OF INTRODUCING SUPERVISING SURVEYORS

As a hopefully applicable way of solution of the anachronistic problem described, the introduction of supervising surveyors has been considered.

In 1998, updated surveying and mapping regulations came into operation in Israel. 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.

This legal possibility was practically applied by the Survey, for the first time, starting in May 2004. The realization of the idea was encouraged by a successful governmental self-investigation, which had been conducted by a committee formed of representatives of the relevant governmental bodies and offices, formulating a number of recommendations for accelerating the whole procedure of land registration. One of them was the nomination of supervising surveyors.

4. THE "SHORT STORY" OF OPERATING SUPERVISING SURVEYORS

For the first time, supervising surveyors were nominated in Israel in 1994. 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. 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.

In 2003, a decision was made by the Survey, to renew the introduction of supervising surveyors.

The basic principles of the 2004 supervisor surveyors project have been described in details (Forrai and Kirschner, 2006). The choice of the supervising surveyors was carried out by a bid, focusing on qualitative professional data. No competition on fee was included in the bid. 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. SOI, keeping the right of the final approval, also commits himself to complete it within 21 working days.

17 applications have been received and carefully evaluated by the competent bid committee. The director general, making his legitimate considerations, nominated 10 winners of the competition in May 2004.

Following the relatively successful first year operation (Forrai and Kirschner, 2006), a second bid was prepared and conducted in 2005. 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). This 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. The injunction that was asked for was not granted by the court and few other court decisions *clearly* accepted the standpoint of SOI.

The initial period of a supervisor surveyor nomination was 3 years, with an option of the Survey to extend it for two additional years. One supervising surveyor returned his nomination to the Director General, another four nominations were not extended over three years, and the nominations of two were withdrawn by the survey. As a result, currently 10 nominated supervising surveyors are active. Each supervising surveyor, whose nomination – from any reason – had been interrupted, was allowed to complete all his obligations formerly undertaken.

In 2006, two of the supervising surveyors were specifically authorized to investigate those mutation plans which had been prepared by other supervising surveyors. Earlier, the supervising surveyor was prohibited from checking mutation plans, which had been prepared by other supervising surveyors. Supervising surveyors' plans should be investigated and approved by the survey. This restriction was stated for avoiding clash of interests. The supervising surveyors felt that this practice discriminates against them, as surveyors, in the competition with other surveyors in the market. Important - mainly governmental - customers complained of loosing the supervising surveyors' companies in their bids as competitors, for the reason that they were at a disadvantage and less flexible than other surveyors. Finally, as mentioned, two of the supervising surveyors were authorized to investigate other supervising surveyor's plans, following their self-commitment to be completely excluded from preparing mutation plans of their own. The nomination of these "authorized supervising surveyors" significantly changed the position of a "normal" supervising surveyor in the market, as he –

like other surveyors - can choose between SOI and an authorized supervising as an investigator of his own mutation plans. During a year of their activity, the two "authorized supervising surveyors" approved some 120 mutation plans prepared by supervising surveyors. It seems to be a nice result.

The Survey of Israel decided to complete a new bid and a new round of nominations in the middle of 2009, and invites current- and past supervising surveyors as well as new candidates, to compete again. The four most successful supervising surveyors, however, were exempted from participating in the bid, and they are offered to sign a new, 3 year long contract with an option of a 2 year long extension.

5. THE CURRENT STATUS OF SUPERVISING SURVEYORS' PRODUCTION

During the nearly five years following the nominations in 2004, the investigation of more than 2400 mutation plans has been ordered with supervising surveyors. Nearly 1500 of them have been finally approved by the Survey. In the last 2-3 years, supervising surveyors checked some one third of the mutation plans. This considerably positive result has been achieved by the 17 supervising surveyors

The general production of supervising surveyors since 2004 is illustrated in figure 2. One can see that – along the nice success – a basic negative tendency, identified clearly after the first years of the operation, has been increased: the rate of the orders from supervising surveyors considerably exceeds the rate of their supervising output. It seems to be strange, but a certain part of the plans given back by the supervising surveyor to the supervised surveyor for corrections, will be very slowly corrected – or never. Some reasons can clearly be identified. One of them is, that a number of municipalities consider the completion of a mutation plan by a surveyor as a precondition for a building permission, assuming that the plan will be legally confirmed within a short time. Another reason is, that – in many cases – the most of the fee of the surveyor is paid to him by his client at the beginning of the supervising procedure – not at its end. As a result, the "statistically average time" of supervising a plan by an "average supervising surveyor" is about a year, approaching the typical time which is required for SOI for completing the same task.

The distribution of the plans to be supervised, ordered from individual supervising surveyors, is very inhomogeneous (see figure 3.). As seen on the figure, on the one hand, four supervising surveyors supply 66% of the total achievement; on the other hand, four other supervising surveyors together carried out less than 4 % of the whole production.

6. THE "PSYCHOLOGY" OF THE SUPERVISING SURVESORS' PROJECT

Probably the most fascinating aspect of the supervising surveyor project is its "psychology".

The main dramatic change for the supervising surveyors is the inevitable change of positions. At one time 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 necessarily facing new reality, different views and dilemmas (Forrai and Kirschner, 2006).

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

SOI and supervising surveyors should work together. They need SOI for getting data, seeking relevant and unique information, they have a duty to report 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. Both sides conclude with satisfaction that the experience has improved their relationship, and the authors are convinced that both sides had their benefits from that improvement.

SOI representatives are more "conservative" and more "loyal" to rules to be kept. Supervising surveyors generally intend to be more "flexible" and to apply professional considerations which "overrule written but less relevant instructions".

No doubt that acting as a supervising surveyor is more than a job. In a certain meaning it is a *mission* - a difficult mission. The personality of an individual supervising surveyor, not less than his professional ability, plays a significant role in his professional and economic success or failure.

7. 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".

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 takes, the less advantage over SOI will be achieved, and the component of the price becomes significant. No doubt that the "rivalry" with the supervising surveyors has a positive effect on SOI supervising activity. (When realizing that you are not in a monopolistic position anymore, as an "instinctive reflex" you will do your best to improve your own performance.)

Anyway, a supervising surveyor nomination seems to be very "valuable" also from economy point of view. The direct income from supervising tasks is not too high, but the prestige of the job has a general and positive impact on business. The image of a successful supervising surveyor inspires confidence in his potential clients in many senses.

8. LEGAL ASPECTS, EVENTS AND CONSIDERATIONS

8.1 Delegation of power on the basis of surveying regulations

The initial anchor for the feasibility of the idea was in section 51 of the Surveyors' Regulations.

8.2 A real bid – or a "bid-served" delegation of power?

In a way SOI volunteered to nominate the supervising surveyors by a tender process. This attitude served as a guide to the choosing process: structured, well defined, open to all qualified participants and to criticism.

8.3 The call for proposals

The civil service generally does not use the kind of bid which was applied in this case. The bid was based entirely on quality prerequisites and considerations. The structured documents were very detailed and set the "rules of the game" very precisely. The main goal for future days was to prove that SOI will stick to the rules which were set.

8.4 A quality based and well documented choice of candidates

The choice of a quality based bid was a bit daring. That kind of bids demands more intensive preparations and is easier to be attacked because the results are not "mathematical" but contain a certain amount of judgment (and even personal judgment and evaluation). As the SOI did not have a full computerized data base of surveyors' past achievements, the arrangement for the bid and its execution included "human" examination of data. The careful process was tested in court and the full documentation of the data and the considerations were available to present to a court. That was very helpful convincing that due process has taken place.

8.5 The committee for surveyors' nominations

The whole bid process was handled by the "committee for surveyors' nominations" which was dedicated to the topic. The committee was "committee for tenders" as customary. The unique component was its dedication to that subject.

8.6 Contracts and nominations

A detailed contract was a part of the documents of the bid. That was done in order to enhance the terms of supervising surveyors' activity and set the rules from the starting point very clearly. The terms of the contract contains the duties of the supervising surveyors and of SOI towards them, the prohibitions, their obligations and responsibilities to the public and to other surveyors and so on.

The contract also included reference to situations of breach of contract, which was proven very useful.

8.7 Keeping the rules

One of the missions that had been proven hard and very sensitive to fulfill in reality was the enforcement of the conditions of the contracts. There was a continuous struggle to form a firm and practical attitude to the daily issues and conflicts that arose during the operation. One must take into consideration that the perception of the operation and conflict involve not only the two obvious "actors" (the supervising surveyors "against" SOI). SOI must bear in mind and represent not only its own interests but mostly the interests and needs of two other silent but very important "actors": the "regular" surveyors and the public (their customers). The growing number of orders directed to supervising surveyors proves that SOI managed to handle this conflict quite successfully.

8.8 An early attempt to form a "cartel"

The decision to pay special attention to the acting supervising surveyors had proven as a right one. There was an early attempt to form a cartel. In Israel forming a cartel or other forms of restrictive agreements is a serious criminal offense. In our case the additional severity of that behavior was the direct contradiction to one of the main goals of the project: enhancing public benefit by offering an additional way to get the plans proven. As there was a clear attempt to break not only the terms of the contract but also state laws, SOI's reaction was decisive and tough. During the continuance period, the "powers of the market" played their role. As SOI had set firm demands considering the minimal quantity of plans to be checked, the supervising surveyors used their prices as well as their other personal qualities and advantages to gain more costumers.

8.9 Applications for court decisions and their effects

There were two applications to the court: one - attacking the second bid and one attacking the decision not to prolong the nominating of one of the supervising surveyors. Both legal procedures were time-consuming and caused much tension to everyone involved, but ended in clear verdicts supporting SOI's standpoint (and even ordering the petitioners to cover its' expenditures). In both cases the petitioners were not granted restraining orders from the court so SOI was able to continue the process without any real interruptions. The main benefit from those supportive rulings was the message that SOI rules of bid and contract are fair and justified by court and SOI's decisive approach was justified. It was also good for SOI's image and especially for its perception between the surveyors. The court had recognized that the main goal of SOI in the nomination of supervising surveyors was to serve public good (and not - only or mainly – the supervising surveyors' one). That recognition influences the apprehension of the nomination and the interpretation of the legal terms. This determinate position will, hopefully, help SOI in its current bid which will be based on the previous one with minor adjustments

8.10 Exemption from competition and its effects

The need to ensure the continuous operation of the supervising surveyors leads to the idea to exempt the most successful ones of them from a bid. Only four of the operating supervising surveyors were exempted, those who had followed the terms of the contract and had the highest contribution to the project.

9. FUTURE: DILEMMAS, PLANS AND EXPECTATIONS

The contracts with the supervising surveyors were limited to 3 years, with a possibility of extension of maximum 2 additional years. SOI decided to prepare the "next round". There are a number questions arising to be discussed and solved during the preparation of a new bid, concluding lessons of the first five year long period. What should be the total number of supervising surveyors to be nominated? How can we give significance to the accumulating experience of the existing supervising surveyors, and yet, give a fair chance to "newcomers"? What is the "healthy" rate between formerly nominated supervising surveyors and the "newcomers"? Will the quantities, qualities and complexity of the supervised plans by individual supervising surveyors be taken in consideration in the future – and how? Should we extend – or, at least, encourage – further extension of supervising surveyors' authorization? How long time should the nominations be valid? How many years of successful practice will grant to a supervising surveyor a "life long" nomination?

All these dilemmas - and many others- 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 really not negligible. The average, comprehensive time of the supervision task should be subsequently and significantly reduced, while keeping its quality on permanently high level.

10. CONCLUSION

As mentioned, a permanent tendency of the past decades is that growing governmental tasks should be completed by reducing governmental personnel. The supervising surveyor project may also suggest an applicative model for the solution of similar problems arising in other fields of governmental activity.

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REFERENCES

Forrai, J., Murkes, S., Vosnesensky, L., Klebanov, M., 2004, Development of a Better Cadastral Practice at the Survey of Israel, FIG Working Week Athens, Greece, May 22-27, 2004

Forrai, J., Kirschner, G., 2006, Operating Supervising Surveyors – Two-year Experiment of an Unusual Governmental Enterprise, XXIII FIG Congress, Munich, Germany, October 8-13, 2006

BIOGRAPHICAL NOTES

Dr. **Joseph Forrai** was awarded M.Sc.(1974) and D.Sc.(1980) degrees by 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.

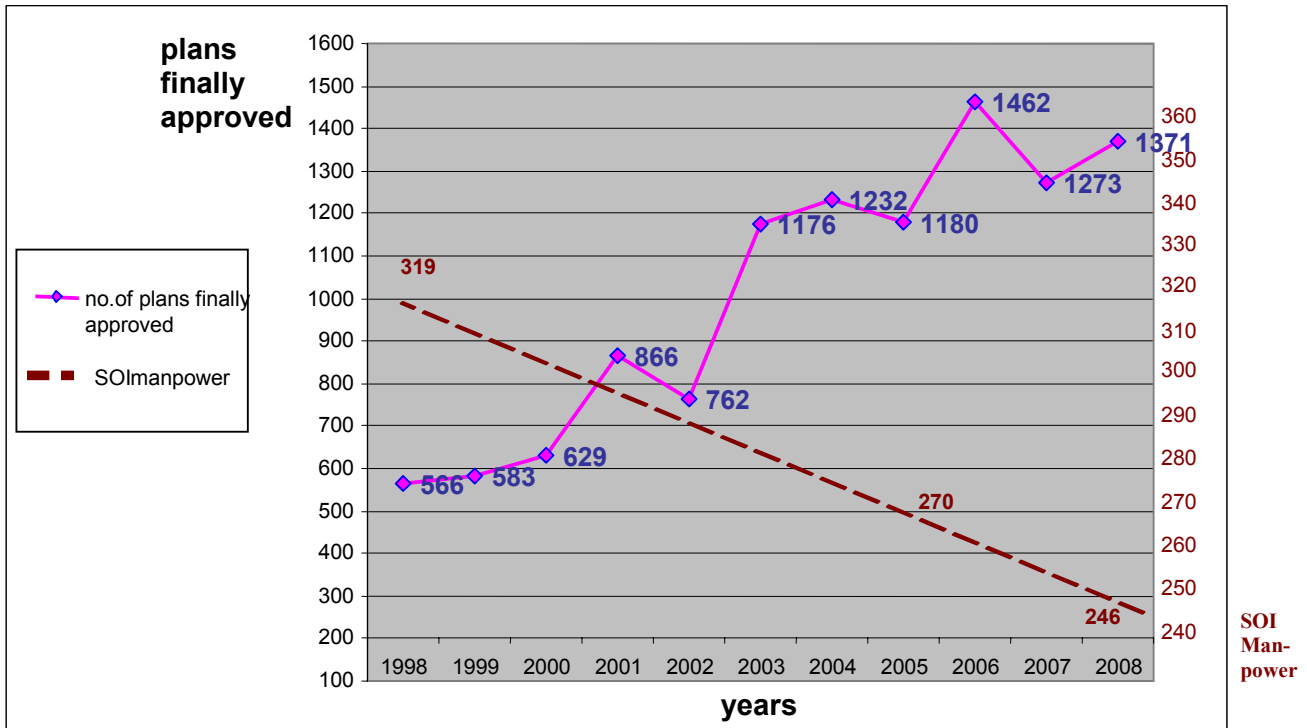
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Fig.1. Increasing supervising tasks to be carried out by decreasing professional personnel



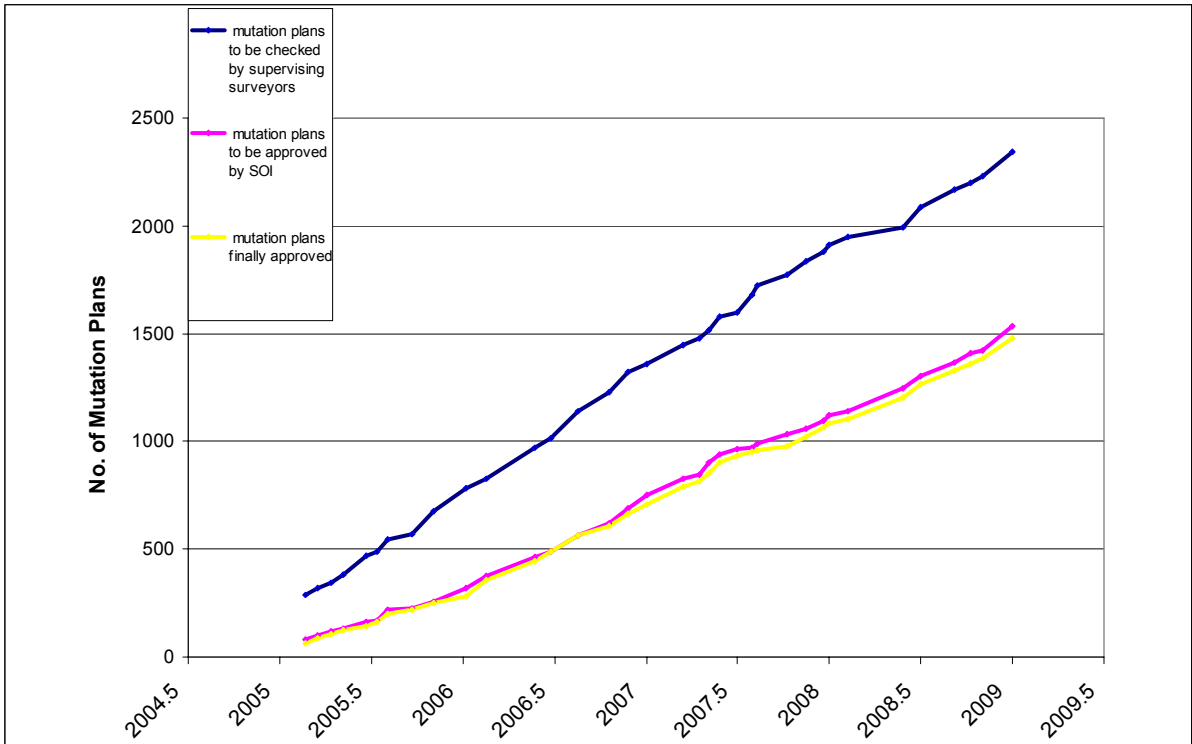


Fig.2. Supervision of mutation plans completed by supervising surveyors

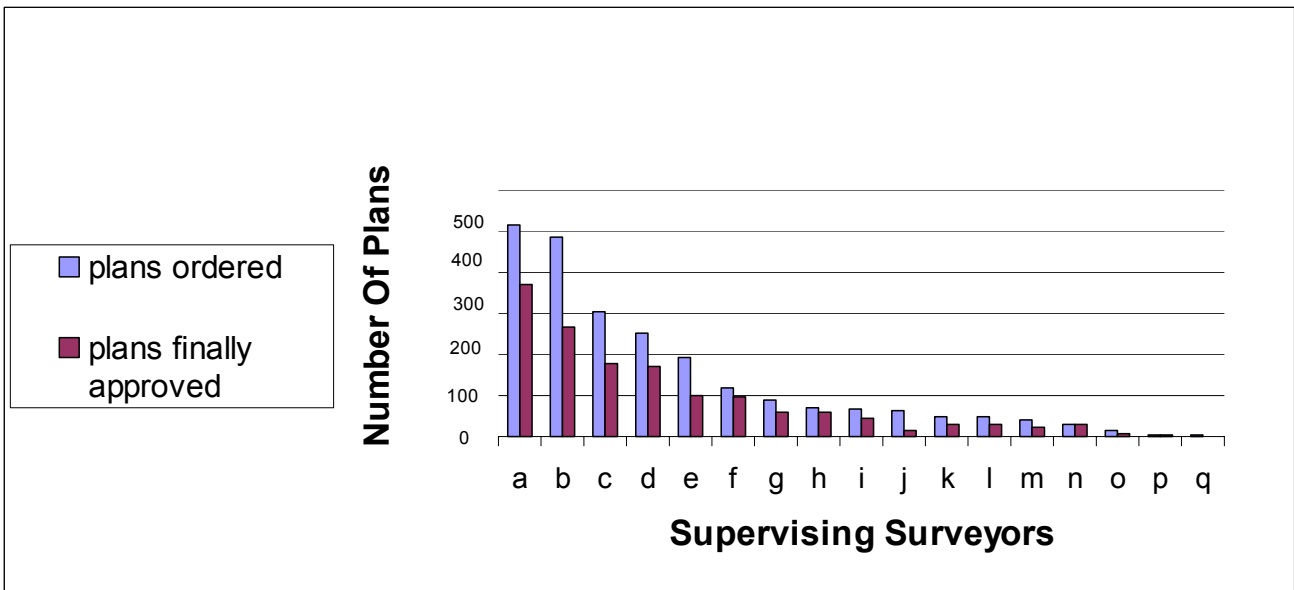


Fig.3. Distribution of plans ordered / checked by supervising surveyors (January 2009)