

21 June 2013

CEPEJ(2013)7

EUROPEAN COMMISSION FOR THE EFFICIENCY OF JUSTICE
(CEPEJ)

WORKING GROUP ON THE QUALITY OF JUSTICE
(CEPEJ-GT-QUAL)

**Guidelines on the Creation of Judicial Maps
to Support Access to Justice within a Quality Judicial System**

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1. Introduction

1.1. Background and objective

Justice, along with other fundamental rights such as health, safety and freedom, represents one of the most important human rights and one of the pillars of civil society. For this reason almost every country has developed over time a network of courts, more or less extensive, with the goal of making the administration of justice as close as possible to citizens.

We live in times of permanent and profound changes: the creation of new infrastructures makes certain places more accessible than in the past when they were completely isolated; moreover, the development of modern means of transport makes it faster and easier to travel from one city to another. Technology has changed the way we work and the modes of interaction between individuals, businesses and the public administration.

In addition to all of the above, in the recent years we have been witnessing an overhaul of the production processes, whether private or public, aimed at the rationalisation of assets, at the reduction of costs and at the increase of efficiency due to the global economic crisis that is forcing most western organisations to optimise profoundly the use of their resources while maintaining high attention to quality. The administration of justice is part of this context, and as a consequence it is in the process of reviewing its organisation in a way to optimise asset allocation and increase efficiency without losing attention to the quality of both the service provided and of the judgments.

The objective of this document is to provide a framework by which administrators and policy makers may undertake reforms and take operational decisions to design (or most probably re-design) the judicial map of an entire country or of a part of its territory.

This document is intended as guidelines for identifying the factors that should be taken into account when deciding the size and location of a particular court to ensure that the optimum level of efficiency and quality is achieved. In other words, the objective is to maximise the service level of justice while optimising, in the meantime, operational costs and investments.

1.2. Judicial maps: what is it about

In the economic theory, the issue of the reorganisation of courts in terms of size and location is known as Supply Chain Management. There are hundreds of practical applications of this subject in many and different contexts that ultimately appear very similar to the design of judiciary maps. Managers of public transportation systems need to draw the map of itineraries and of the stops looking for the right balance between proximity of travellers to points of interest and sustainable number of lines and stops. In the health-care, decision makers must locate hospitals strategically in order to make first aid and the specialised departments quickly and easily accessible, but, at the same time, they need to create structures with a minimum size in order to ensure the right mix of medical competence and required equipment. Investors in a chain of gyms should try to cover as many locations as possible in the city but at the same time they need to optimise the relationship between investment in equipment and predictable flows of customers.

Exactly like the situations faced by the operators in the fields described above, that of judicial geography is therefore a problem of balance between different factors:

- Access to justice in terms of proximity of citizens to courts.
- Minimum size of a court so that the presence of various competences and functions can be ensured.
- Reduction of costs as the resources of the public administration cannot and must not be wasted but rather optimised.
- Maximisation of quality and adequate performance of the service provided.

The frame described in this introduction is useful to state an important principle underlying the spirit of this document. In fact, it is not the intention of these guidelines to identify a deterministic approach for the definition of a perfect judicial map. Instead, just like all tools developed by the CEPEJ, this document would rather provide an overview on the creation of judicial maps by listing a series of factors to be evaluated by operators when deciding on the optimum allocation of resources. Hence it represents open guidelines aimed at helping policy makers in pursuing the objectives that have been set for the equilibrium of the respective judicial system.

As a matter of fact, reviewing the judiciary maps normally ends with a decision on which courts should remain and which are to be closed down. Therefore, the deciding authorities have to carefully evaluate the needs for justice throughout their territories and apply homogeneous rules.

1.3. Phases of judicial maps review

While in the past the long distances together with the limited means of communication made it necessary to build several judicial offices, often self-sufficient and self-managed, in modern times it has become necessary to see the courts as part of a "network". Courts can no longer be seen as single and independent units but as a "constellations of offices," represented in the classical reticular shape where nodes are interrelated with other parties, both internal and external to the world justice. A network for the optimum delivery of services where it is essential, meeting the needs of the citizens.

In essence, the objective of managing the allocation of courts is to build and optimise the linkages and coordination between offices, other institutions, businesses and citizens. It consists of a process planning, organisation and management of activities, designed to optimise the flow of business, in both the criminal and civil sectors, with all relevant procedures and within the different instances of judgment, while taking into account the moves that the user must make in the geographic area where he lives in order to assist the conduction of proceedings.

The definition of a judicial map is a complex activity that needs to be broken down into phases that can take several months before they are fully completed. Such main phases can be defined as in the chart below:



A description of each macro-phase is set out in the next chapter. The paragraph dedicated to "Build and Measure Indicators" describes and provides key guidelines on a set of factors that might be taken into account by policy makers when they instigate a judicial map reform.

2. Conducting judicial maps review

2.1. Assess current judicial map and indicators

It is important to stress that, when reviewing or designing judiciary maps, the availability of data and information plays a major role. In particular, the knowledge of quantitative and where possible qualitative information about the demand of justice, as well as the types of litigation in the civil sector and types of crime in the criminal field are key to support the decision making process.

It may appear strange that the flow of phases provided in these guidelines starts from the assessment of the current situation and only then it is followed by the definition of objectives and criteria, as the logic would seem to be the opposite. This point is debatable and the guidelines do not intend to be too restrictive in this aspect. However, the intention is to stress that policy makers really need to know their judicial systems in every detail before defining objectives and especially criteria, because without a robust knowledge base the reform would be weak. Sometimes it is better to set the final goal of the reform right after having assessed the real situation, having in mind what reasonably can be pursued.

Authorities need to collect data from internal and external sources:

- judicial administration data such as incoming, completed and pending cases including all inherent sub-classifications and distribution shall be retrieved from ministries of justice and other court administration authorities;
- performance indicators like offices' and judges' productivity, proceedings disposal times can be provided by statistics departments within judicial systems or even collected by the courts themselves;
- geographic, transportation and infrastructure data can be taken from specialised authorities or rather found on reliable sites on the web;
- any other specific information such as the level of business, number of enterprises, legal assistance etc. can be retrieved by associations of professionals and again from reliable websites.

2.2. Set objectives and criteria

Justice is everywhere a very ancient organisation; as a consequence, the judicial maps have in many cases become obsolete and inefficient with dimensions and competences not adequate for the realities of the territories and society. This results in evident anomalies in the geographical distribution of courts as well as a suboptimal distribution of human resources leading to large differences between courts' activity level and effectiveness. Moreover, many judicial systems showed an increased backlog, with slow but inexorable increase of disposal times in both civil and criminal sector, which is in opposition to the principle of an efficient justice¹.

The baseline for starting a project of judicial map can be very different from one country to another, and therefore each reform may pursue different aims. In a country like Italy, where before the reform there were more than 2.000 courts, the decision was to reduce the number of first instance courts in order to improve the effectiveness and efficiency of the whole judicial system². To reshape the judicial system, the technique used is the suppression of the smallest and less efficient structures in order to merge them with larger courts.

Other European countries are consolidating judicial functions geographically, thereby reducing the number of courts. Indeed, these reorganization processes are not only driven by financial reasons. Some countries like Denmark, Norway and the Netherlands implemented such projects in order to enhance the quality of justice. Besides economic savings and quality improvements in general, the specialization of courts by ensuring the minimum necessary number of judges, or introducing new technology and improving timeliness are mentioned as motives for upscaling³.

At the same time we cannot exclude that there could be situations in which policy makers may be willing to introduce new judicial locations in order to reduce distance to citizens. In the Netherlands, for example, several cities with more than 100.000 inhabitants did not have any court or tribunal whereas cities with a demographic deficit still had a court⁴.

In Italy, indeed, a number of anomalies exist (although partially addressed by the 2011-2012 reform): the districts of Taranto, Messina and Reggio Calabria cover areas between 2.500 and 3.200 square kilometres (each about 1% of the Italian surface) while the districts of Turin, Bologna and Florence cover areas up to ten times larger, between 22.000 and 29.000 square kilometres (each about 8% of the Italian surface). The tribunal of Mistretta in Sicily serves 22.154 residents, while Rome covers a population of 2.612.068 inhabitants. The 50 smallest courts by population served (30% of all Italian courts) account for 9% of the Italian population.

The excessive number of courts, together with the irrational distribution of resources and locations were the driving forces of many judicial maps reform in Europe, like in Croatia and in Italy. Here the issue of the geographic distribution of the courts has been debated for over a century since the unification of Italy in 1861 and up to now, though there has never been a serious legislative intention to redraw the judicial map in accordance with the structure and the real needs of the civil society.

Indeed, in the Netherlands one of the main objectives of the reform was the redistribution of human resources in order to avoid misbalances, and in Italy following the reform of the judicial map a profound redistribution of human resources is being carried out at present.

As briefly mentioned above, in addition to the demographic evolution in the countries and to the unequal distribution of human resources, it is relevant to highlight the existence of a growing demand for very specific knowledge due to the growing complexity of law and business. This aspect reinforces the need for judiciary reforms that would seek to provide higher legal expertise. Here we witness another trade-off between the need for specialisation which imposes a certain minimum size of courts – and proximity to citizens which ultimately has to do with the access to justice.

2.3. Build and measure indicators

There are many indicators that may be used in order to establish the optimal balance between the activity of the courts and the proximity to users. In addition to this, the presence of a nearby penitentiary should represent a remarkable constraint in the decision process, as for security and economic reasons it is convenient to reduce the travel distances for prisoners who are defendants in a trial.

¹ See Comparative study of the reforms of the judicial maps in Europe, Sciences Po Strasbourg Consulting – 2012.

² *LEGGE 14 settembre 2011, n. 148, Conversione in legge, con modificazioni, del decreto-legge 13 agosto 2011, n. 138, recante ulteriori misure urgenti per la stabilizzazione finanziaria e per lo sviluppo. Delega al Governo per la riorganizzazione della distribuzione sul territorio degli uffici giudiziari. (11G0190)*

³ European Network of the Councils of Justice (ENCJ), Judicial Reform in Europe Report 2011-2012.

⁴ See Comparative study of the reforms of the judicial maps in Europe, Sciences Po Strasbourg Consulting – 2012.

In Italy it was key to measure the office activity and the productivity of both judges and courts, because in the selection of first instance offices to be closed down the focus was on those with limited size and poor performance. To this end specific thresholds were used, often set at the average level of performance indicators taken over a period of five years before the reform. The principle applied was that offices with indicators far below the arithmetic average could benefit from economies of scale if merged with bigger and more productive ones.

In this regard, the factors listed below are considered most essential for a correct definition of judicial maps. They are divided into two main categories: “Key factors” which are those of primary importance, and “Additional factors” which are of secondary importance and that, if utilized, would increase the completeness and robustness of the analysis. Key factors are clearly quantitative or easily quantifiable indicators, and therefore they can be measured with objectivity. On the other hand, among the Additional factors some are qualitative indicators that are not easily measurable (e.g. the level of business, the environment for the recruitment of magistrates and staff etc.) and some have a minor impact (like mediation or the cultural sophistication) as a consequence, although some type of measurement can always be defined also for them. It is thus preferable to have them in addition to the key criteria in order to build a more robust reform.

a) Key factors

- i) Population density
- ii) Size of court
- iii) Flows of proceedings and workload
- iv) Geographical location, infrastructure and transportation

b) Additional factors

- v) Computerisation
- vi) Court facilities (telephone/video) and cultural sophistication
- vii) Level of business
- viii) ADR/mediation
- ix) Availability of legal advice
- x) Recruitment of judges and staff

2.3.1. Population Density

Although in order to better determine the optimum size of a court, whatever the number of people living in the area of competence, the level of demand of justice has a more direct impact, we cannot neglect that a balance in terms of population served by each court is an important factor to be considered when reforming the judicial map. For example, Portugal reported an unequal distribution of the population derived from the advent of the rural exodus forcing more people to relocate to the coastal area. This results in a great increase of the demand of justice in Porto or Lisbon⁵. Also in Italy reformers observed specific moves of populations, with regions like Veneto that once were rural becoming industrial over the last decades, with a profound change in the number, distribution and type of demand of justice. On the contrary, other locations have been facing a low demand and are quite inactive, especially if their size and staff allocation has not been reduced accordingly.

There is no given optimum number of people to be served by a court, also because it would be more correct to consider the relationship between the size of a court and the population served. Nevertheless some statistics may be given, and to this end a description of the court activity is required.

Courts perform different tasks according to the competences that are laid down in the law. In the majority of cases, courts are responsible for dealing with civil and criminal law cases, and possibly administrative matters. In addition, courts may have a responsibility for the maintenance of registers (land, business and civil registers) and have special departments for enforcement cases. Therefore, a comparison of the court systems between the member states or entities needs to be addressed with care, considering the actual jurisdictions⁶.

Out of the 47 systems evaluated with reference to the situation in 2010⁷, most states or entities (19) have less than one first instance court of general jurisdiction per 100.000 inhabitants. In 15 states, the rate is between 1 and 2 first instance courts per 100.000 inhabitants. Thirteen states have higher rates, but of these only Turkey, Russian Federation and Monaco have quoted more than 5 courts per 100.000 inhabitants. The figure reported by Monaco

⁵ See Comparative study of the reforms of the judicial maps in Europe, Sciences Po Strasbourg Consulting – 2012.

⁶ European Judicial Systems – Edition 2012 (data 2010): Efficiency and Quality of Justice (CEPEJ).

⁷ European Judicial Systems – Edition 2012 (data 2010): Efficiency and Quality of Justice (CEPEJ), Figure 5.2 – Number of first instance courts of general jurisdiction (legal entities) per 100.000 inhabitants in 2010.

must be considered taking into account the small number of inhabitants, which has a distorting impact on ratios per 100.000 inhabitants.

Exactly as it may result within the single countries, also by looking at European judicial systems averages, we can notice a certain statistical variance in the number of population served by the first instance courts (i.e. the total number of courts for general jurisdiction and specialised matters). For example, in Belgium there is one first instance court for each 401.478 people on average, but on the other hand, in a country with a similar population such as Hungary the number of population served by each first instance court is much lower at 76.229 people. In two large comparable countries such as Spain and Italy the number of people served is 20.503 per court in Spain and 49.250 (i.e. more than the double) in Italy.

In terms of statistics it would be helpful to know that among the 42 countries assessed by the CEPEJ for this indicator, the average number of people served by a first instance court is 25.599 (calculated by dividing the total population of 712.980.053 by a total of 27.852 courts). This number is surprisingly small if we look at the list of average indicators by country, but it is due to the weight of the largest countries like the Russian Federation (9.978 courts serving 14.323 citizens each) and Turkey (4.298 courts serving 16.883 people each).

2.3.2. Size of Courts

A court is defined by the CEPEJ as a “body established by law and appointed to adjudicate on specific type(s) of judicial disputes within a specified administrative structure where one or several judge(s) is/are sitting, on a temporary or permanent basis”. For the purposes of this paragraph we can assume to deal with general jurisdiction courts, all comparable in terms of type of disputes treated.

Indeed the size of a court may be defined by the total number of people employed, i.e. the number of magistrates, *Rechtspfleger* and other administrative staff taken together. In this sense, if we assume that in an ideal judicial system the ratio of all administrative staff vs. judges is nearly constant for all courts and that all judges bear the same, or nearly the same, workload, then more pragmatically **the size of the court can be referred to as the number of judges working in that court**⁸.

What is the optimum size of a court in terms of level of business it has to deal with? In addition, what is the correct level of workload to ensure that a court benefits from economies of scale? Is there a sufficient variety of cases and numbers to ensure that the courts are utilised as much as possible?

These questions are related to the problems mentioned in the first chapter of these guidelines when referring to the issue of the optimum allocation of resources. A small court may lack in productivity because the flow of proceedings is too low to exhaust the capacity of its judges. Nevertheless, a small number of judges versus the same variety of topics of the proceedings of larger courts may lead to a lack of specialisation and thus result not only in a lower efficiency (focus on cost) but also in a lower effectiveness (focus on quality). On the contrary, a large office such as those typically found in metropolitan cities may lack in productivity for inefficiencies that are strictly related to its large dimension, where bureaucracy is a constraint and prevails over the normal judicial activity.

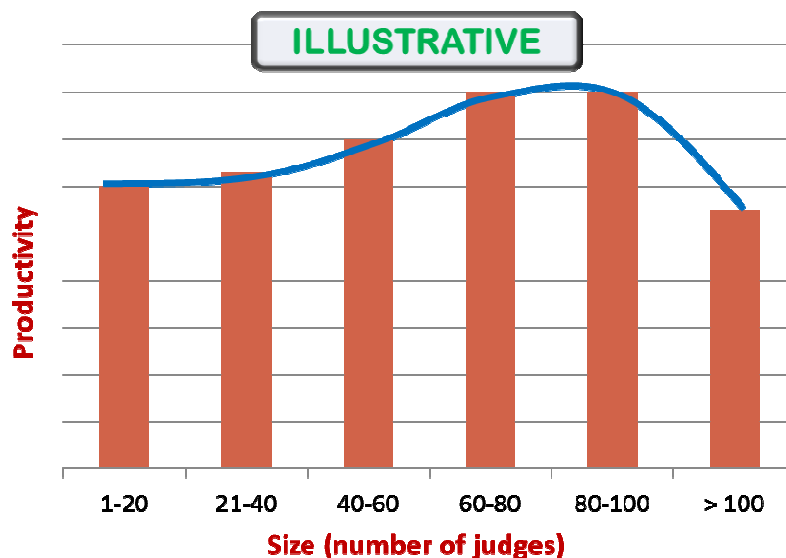
In some situations productivity of judges may be utilised in order to determine the optimal size of a court. Productivity of a court may be defined as the number of proceedings completed by the court in a given period of time. In this sense the productivity of the office is the sum of productivities measured per each judge working in that court.

The Statistics department within the Italian Ministry of Justice has produced a study on the productivity for each court and then summarized the results by grouping offices according to their size (average productivity of offices with 0 to 10 judges, with 11 to 20 judges, and so on).

The study conducted with real numbers confirmed the common perception stated above. In fact, the curve of productivity is a parabola, i.e. the lowest levels are associated with courts of up to 20 judges, then the productivity increases with the increasing size of offices, and finally it decreases again after the size of the court attains (and exceeds) a certain (high) number of judges. In the Italian case-study shown below, the highest productivity levels are found in courts with a number of judges between 60 and 100. The productivity falls again when the number of judges exceeds 100.

⁸ In those judicial systems where the *Rechtspfleger* exist, the size of a court may be pragmatically understood as the total number of judges and *Rechtspfleger* working in that court.

However, if we consider that, on average, the overall size of other judicial systems is smaller than that of the Italian system, we can assume that the highest productivity at European level is attained in courts with an approximate number of judges between 40 and 80.



Similar studies were conducted in the Netherlands, one over the years 2002-2005 and another in the period of 2005-2009. The results were not much different from those shown above: in fact, based on the existing organizational structure, productivity was highest in medium-sized courts, while both very small and very large courts were less productive. The conclusion was that, on the one hand, it can be of benefit if small courts with an unfavourable productivity are merged into larger courts. On the other hand, the merger should not lead to the other extreme – obtaining very large courts, as these courts would be at risk of demonstrating even lower productivity than the smaller courts they emerged from⁹.

If the objective of a judicial map review, or one of its goals, is to obtain courts of an average size that would optimise judges' productivity, the exercise would be that to merge small offices with low productivity into bigger ones and eventually reduce the size of some inefficient large courts.

In order to better understand the effects of applying such principle we can imagine two offices, Court A₀ with 20 judges, and Court B₀ with 100 judges. If they show an average productivity lower than an office with, let's say, 50 judges, we could re-design territory and competences in order to get two new offices, A₁ and B₁ with around 60 judges each. This solution was experimented with in Italy at the tribunals of Turin (reduced in size) and Ivrea (increased in size).

In a second example we can imagine two other offices, Court C₀ with 15 judges, and Court D₀ with 35 judges. If they show an average productivity lower than an office with, let's say, 50 judges, we could make a different type of intervention than the previous one consisting in the merger of offices and territory into a new one, Court E₁ with 50 judges, i.e. the sum of the judges from courts C₀ and D₀. This solution was extensively applied in the recent reform in Italy to about 30 small offices closed down and merged into bigger ones.

2.3.3. Flows of Proceedings and Workloads

For the purposes of this paragraph we assume to be dealing with general jurisdiction courts, all comparable in terms of type of disputes treated with all judges performing with the same, or nearly the same, productivity.

In the previous paragraph we gave general guidelines for coping with issues of finding the optimum size of a court based on judges' productivity. Following this principle, in one of the two examples shown at the end of the paragraph we obtained two new offices A₁ and B₁ with around 60 judges each. Now, let's put the case that the analysis of historical flows of proceedings shows that court A₁ gets 12.000 cases per year, and court B₁ gets 14.400 cases per year, comparable to those of court A₁ in terms of difficulty. If both offices effectively perform with comparable productivity, whatever is the level of productivity, we would have either two non-equilibrium cases: in fact, if productivity is higher than 200 cases per judge per year we would have over capacity of the office A₁. On the contrary, if we have a productivity of less than 200 cases per judge per year we would have the generation of pending workload at the end of each year in both courts. As a consequence of the above, the ideal solution would

⁹ From: Judiciary In Times Of Scarcity: Retrenchment And Reform, By Frans van Dijk and Horatius Dumbrav.

be to re-define the competences of the two offices in a way to have nearly 13.200 cases incoming in each of the two offices.

However, an additional issue arises in this case because we need to define how to measure judges' and courts' "workload": does it consist of the incoming cases per year per judge only, or does it include also the pending cases at the beginning of the reference period? Moreover, what are the pending cases to be considered? All those open cases accumulated at the end of the last period, or only those that have not been solved within a given period of time?

The problem is arguable. A possible solution to this issue is that pending cases could be treated separately from incoming proceedings applying special measures. In fact, in an ideal situation if the judicial system reaches the equilibrium in terms of efficiency and productivity, the courts would resolve all incoming cases within a reasonable timeframe reducing to a minimum or even to zero the accumulation of old workloads. In other words, the analysis for the definition of the judicial map should be based on incoming and resolved cases only (where productivity is the ratio of these two factors), and then a special and fixed-term team of judges (or even a special effort by the same judges working at each office) should be assigned to the treatment of the pending cases until the stocks are set to zero.

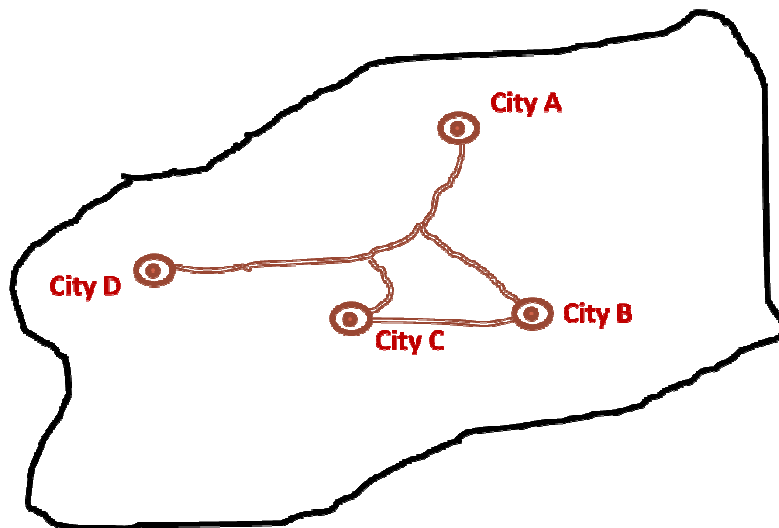
2.3.4. Geographical Location and Available Transportation and Infrastructure

In many countries the geographical location of the court may still be very important due to the need to provide access to justice at a local level. Transport needs and the availability of modern means of communication impact on the public's ability to access justice. Where there is a requirement that a party has to appear physically in court the accessibility of the office is critical. It would be unreasonable to expect a party to travel for an excessive period of time. A standard should be established for reasonableness of the travelling time required.

Having to report to a court for a hearing set early in the morning for an elderly person, or for someone who does not have a car, yet in the absence of adequate means of transport for those who need to travel from another city are all problematic situations that may infringe on the right of equal access to justice.

Also in this case when searching for an optimal distribution of the offices, the principle to be applied in terms of localization is that of minimizing the distance between the judicial office and all the municipalities of the territory.

A case sample is provided below, with an imaginary map of a territory with four major cities (A, B, C and D) among which one is to be chosen where a tribunal satisfying the condition of the minimum distance from citizens would be located.



The problem can be resolved by generating a table indicating traveling time by car between the 4 cities. We shall also assume that each city is representative for all small towns around it.

From / to - in minutes	City A	City B	City C	City D
City A	0	30 min	35 min	60 min
City B	30 min	0	20 min	35 min
City C	35 min	20 min	0	20 min
City D	60 min	35 min	20 min	0
Totals	125 min	85 min	75 min	115 min

Apparently, the optimum location of the office, having to choose a unique place among the four listed above, is City C because it minimizes the distances to the other three cities if compared to all other possible combinations. Of course, this analysis is independent from the number of people moving. However, if, for example, the location City B had a centre much more populated with a much higher number of cases than City C, then in that case the authorities may decide to give priority to City B as the court location.

Indeed, a further element of analysis arises.

Must all services provided within a court remain within the main court? Do we need the full physical presence of a court, even if what most customers need to do is to collect a form or simply file some documentation to start their proceedings?

Staying in the previous example, in the three places which would have no court, it might be useful to establish points of support for administrative tasks, or simply accompany the centralization of offices with an expansion of eligible on-line processes as it will be discussed below in the section on computerisation.

2.3.5. Computerisation

As described in the paragraph above, geographical reorganization of the judiciary results in larger travel distances for parties, lawyers and employees, and thus in a possible deterioration of the level of access to justice. It seems, however, that many countries are likely to positively cope with this problem. Part of the explanation is that the physical presence of parties and other participants to trial is becoming less mandatory as the implementation of information technology and video conferencing is gradually becoming a standard in large countries, as well as the participation in a hearing remotely is not seen as a serious obstacle by many operators.

Consolidation of courts though should be accompanied by increased utilization of ICT to reduce the frequency of necessary visits in person by parties and lawyers to the courts¹⁰. In addition, ICT should be used to increase the visibility of court proceedings. The greater is the availability of software applications that substitute paper and the need of a physical presence on site, the more remote the location of the court could be. When looking at the geographical location for each court, computerisation may provide a degree of flexibility as to what services are provided at each individual court¹¹.

The use of computers for data processing has helped the management of business organisations to cope with increasing problem of paper handling. The computers have speeded up the process and eliminated the paper needs through the storage of data in elaborately constructed data bases and files. The modern and very efficient storage systems allow saving paper and thus reducing space requirements. In addition, if all judicial documentation is scanned and stored electronically it can also be retrieved through a web connection without the need to visit the court and ask for paper copy or master. In other words, a reform for a modern judicial map can leverage technology in order to reduce the number of offices, provided that consultation or even other basic services such as filing documents or notifying formal acts to parties can be executed on-line.

All advantages of computerisation in the judicial systems are based on the fundamental assumption that the systems employed are secure, and that they guarantee privacy and traceable usage.

2.3.6. Court Facilities and Cultural Sophistication

The availability of technology for hearings to be conducted on the telephone or by video conference adds a new dimension to the accessibility of courts. There may be a limit to the types of hearings that may be dealt with in this way, but if legislation accepts the possibilities offered by technology by removing the need for parties and lawyers to attend every hearing then it becomes an element of evaluation when determining the number and location of the courts. Such technology not only reduces the need to travel to court but it also reduces the costs for the parties by eliminating travelling time.

2.3.7. Level of Business

The level of business is always a factor, or should be, when deciding on the location and size of the court. The level of business should be looked at in conjunction with the question of resourcing and recruitment. Coupled with this is the need to ensure a certain degree of expertise at the court in the subject being decided. Any exercise of

¹⁰ European Network of the Councils of Justice (ENCJ), Judicial Reform in Europe Report 2011-2012.

¹¹ From: Judiciary In Times Of Scarcity: Retrenchment And Reform, By Frans van Dijk and Horatius Dumbrav

this nature should consider the benefits of centralising hearings to provide greater flexibility to ensure the maximum use of the courts time. Courts that do not have a sufficiently large pool of cases struggle to keep their judges occupied.

However there is one theme that emerges from the assessment on the level of business. In fact, similar to the issue of population served and the relationship with the number of proceedings filed, the number of businesses and professionals in the area may be irrelevant to the size and location of a court since the workload per judge of the court is already included in the flow of cases as referred to in paragraph 2.3.3. However, what we would like to highlight in this section as a guideline is that probably, in the case of alternative venues available for locating a judicial office, and assuming all other factors being equal, it may be preferable to pick the site where the economic activity and trade are most intense.

2.3.8. ADR/Mediation

It is important to recognise that alternatives to the court as a forum for resolving disputes are becoming more widely available and may provide a cost-effective alternative to using the court. Although there does not have to be a direct link between the court and the ADR provider, it is invariably the case that they are linked. This service would require the accessibility of trained providers and suitable accommodation, if meetings are to be conducted on the court premises.

2.3.9. Availability of Legal Advice

When deciding where to place a court and what jurisdiction it should have, some considerations need to be given to the availability of legal advice. It is probably the case that lawyers will move to areas where there is sufficient business to justify a presence. This willingness to move cannot be assumed, and adequate precautions have to be made to ensure the users of a court have access to appropriate legal advice.

2.3.10. Recruitment of Judges and Staff

We have already seen above in this document that a careful assessment may be required to establish the number of judges and the sitting patterns to meet the need in the workflow. But additional elements must be considered. To establish a court within a reasonable distance from a law university site is very important especially in those countries where culturally people prefer to work very close to their home-town or to the place where they graduated. Moreover, in many countries there could be areas or single cities in which people, and as a consequence judges, may not be willing to live, creating preconditions for an unstable organisation with a high rotation of judges and a negative impact on the quality of work.

Not only is there a need to ensure that a court has sufficiently trained and experienced judges, but a court also needs to have the required number of administrative support staff for the business being generated.

The difficulty in recruitment and retention of staff is a major obstacle to providing high quality and efficient court services. It is the case that courts based in major cities may have the worst performance records, because the staff is not of the same quality as in provincial courts. The reasons for this are various but would include the lack of a competitive salary, more employment options and the high cost of housing. The geographical location of the court and the way it delivers its services may be influenced by this problem, and appropriate alternative methods may have to be found in order to ensure that access to justice is provided. In the process of establishing the difficulties of poor recruitment and the countermeasures to be employed the benefits of having well trained and experienced staff should also be considered.

As we have seen in the paragraph dedicated to computerisation, modern judicial systems require new competences in order to deal with the modern world where both litigations and crime become more and more sophisticated. Justice strongly needs to recruit more educated people possessing not only legal expertise but also managerial approach, goods and services purchasing skills, knowledge of new investigation technology (wiretapping, other interceptions etc.), IT competencies and knowledge of foreign languages.

2.4. How to Use Indicators in Order to Define New Judicial Maps

This document describes multiple factors and criteria to be considered when designing a judicial map. Although not all of them shall be considered in all situations, it is highly recommended that a sufficient number of different indicators are utilised when defining a judicial map.

In France the necessity to adapt the justice to the evolution of economy and population resulted in the need to use a large number of indicators and data (e.g. demographic data, indicators of quality of the decisions, number and type of cases, number of appeals, processing time etc.). The jurisdictions have been categorized in homogenous groups by grade of judgment and size of court, hence each category was assessed and analysed by the same criteria. In Italy the key indicators used were the population (to be noted that a general population census was carried out in the country in 2011), workloads mostly based on the number of incoming cases, judges' productivity, followed by the surface and distances in terms of travelling time.

A slightly different logic was applied in the Netherlands where the focus of the reform was on enabling the reorganisation of courts' geography in a way to group larger number of cases regarding the same field and therefore facilitating the courts' and the judges' specialisation.

In Portugal and in Italy the reform establishes rules for determining whether the closing down of courts is justified or not. In Portugal, the notions of efficiency and rationality are very important; however, since the reform was implemented in only three jurisdictions and it has not yet been extended to the rest of the country, no real protest arose. On the contrary, in Italy where 949 first instance offices will be closed, the reaction from local authorities, bar associations and operators is very negative.

As perfectly summarized by the Sciences Po Strasbourg Consulting in their *Comparative study of the reforms of the judicial maps in Europe (2012)*, each country used a variety of criteria to ensure the most pragmatic appreciation of each court situation, but there is no denying that in fact the activity level of the jurisdictions prevailed, even though it was, nonetheless, toned down by other considerations such as geographical/temporal distance or the necessity for justice to be present in some areas. This is the case for three tribunals in Italy, located in the south of the country (the tribunals in Caltagirone, Rossano and Sciacca): although they had been earmarked for closure on the basis of their dimension and performance, they were subsequently 'rescued' because they are in the front line of the battle against Mafia. Nevertheless, there are also countries like Germany where, in addition to the quantitative and qualitative factors listed in this document, other influential background factors, such as the historic reasons, would be considered by reformers before taking a decision on closing down a certain office rather than another one.

Nevertheless, the general trend is that courts with the fewest judges dealing with the lowest numbers of cases are targeted and closed down during judicial map reforms. However, whatever the number of indicators selected, the question for reformers is how to assemble them in order to come up with the list of offices to be eventually closed down.

The following example will show that at least two selection criteria, one more restrictive and the other less, may be followed.

We assume that in the region XYZ there are 10 courts (Court A to Court J), and that their number is to be reduced. The policy makers consider the possible elimination of a number of offices using the general criterion of the smallest population served, lower litigation and productivity. Thus, the factors to consider are:

1. Population served
2. Number of new filed cases (measured in relative terms of rate of litigation, in connection with Factor 1)
3. Productivity of judges.

Below is the table with a set of minimum data necessary to conduct analysis for the purposes of the review.

	FACTOR 1 Population	New Filed Cases (INPUT) (comparable)	FACTOR 2 Litigation (cases filed per 100.000 inhabitants)	Cases Completed (OUTPUT)	FACTOR 3 Judges' Productivity	Number of judges
Court A	100.000	1.100	1.100	1.050	105	10
Court B	120.000	1.000	833	1.000	83	12
Court C	80.000	850	1.063	800	114	7
Court D	200.000	1.800	900	1.850	103	18
Court E	180.000	1.500	833	1.500	88	17
Court F	200.000	2.300	1.150	2.250	113	20
Court G	190.000	2.000	1.053	2.050	103	20

	FACTOR 1 Population	New Filed Cases (INPUT) (comparable)	FACTOR 2 Litigation (cases filed per 100.000 inhabitants)	Cases Completed (OUTPUT)	FACTOR 3 Judges' Productivity	Number of judges
Court H	50.000	300	600	250	50	5
Court I	30.000	300	1.000	280	70	4
Court J	150.000	1.500	1.000	1.500	107	14

The reformers decide that the offices to be included in the “possible suppression list” are those falling within the lowest first quartile i.e. the worst 25% offices for each indicator utilized, as highlighted in bold font in the table below.

	FACTOR 1 Population	New Filed Cases (INPUT) (comparable)	FACTOR 2 Litigation (cases filed per 100.000 inhabitants)	Cases Complete d (OUTPUT)	FACTOR 3 Judges' Productivity	Number of judges
Court A	100.000	1.100	1.100	1.050	105	10
Court B	120.000	1.000	833	1.000	83	12
Court C	80.000	850	1.063	800	114	7
Court D	200.000	1.800	900	1.850	103	18
Court E	180.000	1.500	833	1.500	88	17
Court F	200.000	2.300	1.150	2.250	113	20
Court G	190.000	2.000	1.053	2.050	103	20
Court H	50.000	300	600	250	50	5
Court I	30.000	300	1.000	280	70	4
Court J	150.000	1.500	1.000	1.500	107	14

If more restrictive criteria are applied, 4 courts (B, E, H and I) would be eligible for suppression because they fall in the worst quartile of at least one indicator, while applying a less restrictive approach only one office would be eligible (Court H) because it is the one included in the first quartile for all indicators.

But what if the intention of the policy maker is to propose the closure of the 25% of offices, i.e. it is necessary to selection two offices out of the listed ten? In this case there is another criterion that would combine the three indicators into a single one, possibly by utilising normalising factors (otherwise it would be difficult to sum-up population and productivity) and assigning weights to each factor, based on the assumption that they have different impact and importance. Then, from the final rank obtained through this exercise the reformer would choose the two worst performers to be suppressed.

3. Implementing the judicial map

3.1. The transition phase

Whether the revision of the judicial map consists of creating new judicial offices or of closing some offices and subsequently merging them into other courts, particular attention should be paid to the transition from the situation prior to the reform until several months afterwards.

During this Transition phase the aim is to:

- Effectively start-up the judicial services, ensuring continuity.
- Take care of the transfer of staff from the suppressed offices to the merged ones and, if necessary, to recruit additional human resources for the new offices.
- Organize the logistics of the new offices (space, equipment, IT, supplies, etc.).

The Transition activity should be broken down in distinct phases and managed according to a well-defined project plan. From this point of view, it would seem appropriate to set up special work-teams dedicated to this activity within each court concerned.

The achievement of the objectives set for the Transition phase shall be pursued while:

- Minimizing the risks related to the judicial activity being discontinued.
- Minimizing the impact on service-users.
- Ensuring that all activities are conducted within a reasonable timeframe, according to satisfactory levels of performance.

Implementing a new judicial map has its cost. There is a cost of a feasibility study before the reform, and there is an even more significant cost of implementing the new judicial map: closing offices, transferring people, moving documentation, furniture and equipment, hiring new staff, etc. Reformers and policy makers should not conceal this aspect but rather take it into account when facing the overall evaluation. Moreover, if the objective of the reform is to save costs, it is important that reformers prepare a business plan in which they can evaluate the net return over the medium or long term.

3.2. People transfer

Depending on the decisions taken by the reformers and on the legislative constraints existing in the field of labour law, it is possible that a number of staff and judges would have to be transferred from one court to another as a result of implementing the new judicial map. For example, according to the Italian law applied in the public sector, none of the 7.000 staff and 2.300 magistrates affected by the judicial map reform of 2012-2013 will lose their jobs. Nevertheless all of them will need to change the location of the office.

In this regard, special attention should be paid to official announcements regarding the implementation of the judicial map, as long as these messages reach a specific group of people directly affected by the change. While preparing the communication plan the objectives should be:

- To promote a positive reaction to change, ensuring that all those involved are aware of the new judicial map, understand it and perceive it as positive.
- To contribute to stabilizing the psychological climate and motivation of the staff.
- To ensure the consistency of information given over time and to reduce the risk of spreading misleading messages from "unofficial" sources.
- To allow a correct and timely delivery of the messages, gradually providing answers to all reservations of the various parties concerned by the reform.

In addition to the communication a plan must be developed to ensure that operational activities are taken up by the transferred people in an effective and efficient manner, including:

- Assignment of the role and tasks to each person transferred within the new court.
- Management of all administrative duties (entry badge, working hours, IT systems enabling policies, etc.).
- Evaluation of potentially disputable issues related to the terms and conditions applied.
- Guarantee the process of paying the salaries.

3.3. Measuring the impact of the judicial map reform

Many interventions in the public administration sector fail to evaluate their impact. It is important that reformers do not declare the objectives of their reforms without defining how and when such goals will be achieved. For example, typical strategic objectives set for judicial systems before undertaking a judicial map review are those to increase efficiency, to enhance specialization, or even to improve the overall performance of the judiciary.

In the view of the European Network of the Councils of Justice (ENCJ), consolidation of courts must be based on the need to provide for a higher quality of justice, and not solely on the need to save costs¹². Judiciaries should evaluate carefully whether net cost savings can indeed be achieved by merging courts, and must take into account that it may take many years before the desired savings are effective¹³.

This paragraph focuses on some basic principles to be applied in order to measure the achievement of the goals set for the judicial map reform.

First of all, reformers must draft statements associated to the judicial map review that describe specific objectives to be reached by the judicial system through the reform. The goal statement should explain in detail the desired accomplishments and include all considerations, such as how long it may take to accomplish each goal. The goal must be measurable from the beginning and, ideally, some evidence should be available also from the years before the reform for comparison with future data in order to verify whether the results achieved are indeed effects of that reform.

¹² European Network of the Councils of Justice (ENCJ), Judicial Reform in Europe Report 2011-2012.

¹³ From: Judiciary In Times Of Scarcity: Retrenchment And Reform, By Frans van Dijk and Horatius Dumbrav.

Policy makers should then determine all of the specific project deliverables for each goal before any judicial map programme is started. This can serve to ensure that the progress toward a particular goal may be measured effectively.

Nevertheless, data are not enough. Reformers indeed must develop and choose a set of Key Performance Indicators (KPIs) that may be used to measure progress. The KPIs shall provide methods by which the progress toward the objectives of goals is measured. The most effective indicators are those that can demonstrate efficiency gains, performance improvements and, where possible, key qualitative aspects.

The CEPEJ report “European judicial systems” lists over one hundred different KPIs that can be used in order to measure the effectiveness of the implemented reform and also its success, e.g. financial indicators such as the cost of justice per inhabitant; indicators of the level of access to justice such as number of courts and magistrates per inhabitant; performance indicators such as disposition time, clearance rates; moreover, qualitative surveys such as customer satisfaction indicators that can measure perception of the reform by the citizens themselves.

Once KPIs are defined and objective values are set, they should be measured regularly in order to see if reforms are deploying the effects in line with the pre-defined goals. In this sense it is important that the KPIs chosen can be used as evidence of progress, and, finally, demonstrate if the reform was useful or not, or at least how useful it was.

In an ideal system, an evaluation team should monitor the progress towards each goal using the KPI statistics. It should check the metrics each month for a period of at least six months, review the results and meet with decision makers regularly to determine how to proceed. In case of non-alignment, the decision makers should define what corrections, if at all possible, to apply in order to realign the actions and the objectives.