

PUBLIC CONSULTATIONS AND ACCESS TO SPATIAL INFORMATION AS LEGAL INSTRUMENTS OF FLOOD RISK MANAGEMENT USING THE EXAMPLE OF THE Odra RIVER BASIN

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Abstract

The paper presents issues related to access to spatial information and public consultations as selected legal instruments of flood risk management, in connection to modification of regulations concerning those instruments which came into force in 2017, after resolution of the new Water Law. As flood risk management instruments one should understand a preliminary assessment of flood risk, flood hazard maps, flood risk maps and the basic document where activities aimed at the limitation of adverse effects of flood are specified, namely the flood risk management plan. As well access to public information, including spatial information and public consultations may be considered as public participation instruments in management of flood risk. The purpose of this article is to present selected flood risk management instruments from the point of view of using public participation instruments in the process of drawing up the specified documents. This publication presents an analysis showing how legal instruments are used to manage flood risk in the Odra River basin. The paper will present the argument that changes in access to public information introduced by the new Water Law ensure appropriate implementation of regulations of the Floods Directive. However, it may be noticed that the Polish legislation should introduce public consultations as early as at the stage of the preliminary flood risk assessment, according to recommendations calling for ensuring public participation at the earliest stage of planning operations, aiming at mitigation of negative flood effects.

Key words: water law, flood risk management, access to spatial information, public participation

Introduction

Floods are natural phenomena, which may cause serious losses to the society. In the European Union, regulations are in place in the Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (WATER FRAMEWORK DIRECTIVE, 2000) that deal with activities aimed at the reduction of adverse effects of flood. The WATER FRAMEWORK DIRECTIVE (2000) river basin management plans to be developed for each river basin district in order to achieve good ecological and chemical status, and it will contribute to mitigating the effect of floods. In 2007 in European Union the Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risk (FLOODS DIRECTIVE, 2007) was adopted. The purpose of this Directive is to establish a framework for the assessment and management of flood risk, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community (FLOODS DIRECTIVE, 2007).

The transposition of the provisions found in FLOODS DIRECTIVE (2007) consisted in the amendment made in 2011 to the Water Law Act of 18 July 2001 (WATER LAW, 2001). On the other hand, in 2017, the new Water Law Act of 10 January 2017 (WATER LAW, 2017), was adopted and introduced changes in the regulations pertaining to the area of legal instruments used for flood risk management. The FLOODS DIRECTIVE (2007) specified deadlines for approval of particular documents by Member States. According to The FLOODS DIRECTIVE (2007) Member States shall ensure that the flood hazard maps and flood risk maps are completed by December 22, 2013. As well Member States were obliged to develop and publish flood risk management plans by December 22, 2015. Therefore those documents were developed basing on rules specified in the WATER LAW (2001). The FLOODS DIRECTIVE (2007) obligates Member States to review and update such documents as maps and management plans within the coming years. In Poland those documents will be updated basing on rules specified in the WATER LAW (2017), therefore it is worth to point changes in the field of access to public information and public consultations assumed in that act.

For the purpose of this paper, a legal instrument is defined as a mode of operation of an authority that results directly or indirectly for the law and is designed to carry out tasks of the public administration (ROTKO, 1998). The definition of the legal instrument highlights the aspect of recognizing it as a means of achieving a specific goal by the public administration. Flood risk management instruments are meant to limit the probability and consequences of floods using an integrated process that includes preventive, protective and informational activities. Such instruments include a preliminary assessment of flood risk, flood hazard maps, flood risk maps and a flood risk management plan. According to the FLOODS DIRECTIVE (2007), countries are obliged to ensure access to information and perform public consultation at individual stages of the development of documents.

Access to spatial information and public consultations in floods risk management

In accordance with applicable Community legislation, Member States shall make available to the public the preliminary flood risk assessment, the flood hazard maps, the flood risk management plans. Member States shall encourage active involvement of interested parties in the production, review and updating of the flood risk management plans (FLOODS DIRECTIVE 2007). The WATER LAW (2001) did not assume the public presentation of the preliminary flood risk assessment, the flood hazard maps and the flood risk maps. The preliminary flood risk assessment was the environmental information and the public administration bodies, as well as interested parties might apply for the access to that document basing on the rules specified in the ACCESS TO INFORMATION ON ENVIRONMENT ACT (2008). However, flood risk maps were transferred to selected public administration bodies, such as starosts (heads of districts), mayors, voivodship and district commandants of the State Fire Service. The WATER LAW (2001) assumed the public presentation of draft flood risk management plans.

According to the WATER LAW (2017) the minister responsible for water management makes the preliminary flood risk assessment, the flood hazard maps and the flood risk maps publicly available by publishing them on an entity page of the Bulletin of Public Information (BIP) of the Ministry of the Environment. The WATER LAW (2017) does not provide for public consultations within the procedure used for the development of these documents. According to Art. 173(6) WATER LAW (2017) the minister responsible for water management makes publicly available draft plans regarding water risk management in order to ensure active participation of all interested parties in meeting objectives of the flood risk management. The ACCESS TO INFORMATION ON ENVIRONMENT ACT (2008) clarifies the meaning of "making information publicly available". The basic method of notifying the public is the publication of information in the Bulletin of Public Information (BIP) mentioned in the Act of 6 September 2001 on the Access to Public Information (ACCESS TO PUBLIC INFORMATION ACT, 2001). According to the ACCESS TO PUBLIC INFORMATION ACT (2001), BIP is an official online publishing system designed for dissemination of public information using a standardized system of pages in the ICT network (Art. 8(1) of the ACCESS TO PUBLIC INFORMATION ACT (2001)). As the technical basis for its operation, the BIP uses the Internet as information available in the BIP is accessible from any computer connected to the Internet. Owing to this solution, access to public information is universal, fast, free of charge and without time- or location-related limits, which means that principles of access to information are implemented in the best possible way. The bulletin consists of the main page and pages of individual entities obliged to ensure access to information (so-called entity pages). Entities specified in the act are legally obliged to maintain a BIP page on the Internet (KAMINSKA, ROZBICKA-OSTROWSKA, 2016).

Another method of making information publicly available is "Publication of information in line with the prevailing custom at the headquarters of the relevant authority." The future law should provide for obligatory notification of planned projects both in a customary way and at the headquarters of the authority. Such an amendment would meet the requirements of the doctrine as the wording "in line with the prevailing custom", as found in the prevailing legislation, is closely connected with the displaying of a notice at the headquarters of an authority. This is so as the interpretation of Art. 3(19) shows that the expression "in line with the prevailing custom" is an inclusion in the expression "publication of information (...) at the headquarters of a relevant authority". This inclusion only specifies a method that should be used to publish information at the headquarters of a relevant authority and not a separate method of publication. It is worth it to supplement provisions on providing access to public information with a provision saying that the public may be notified "using other method of public communication as customarily used in a given locality".

The next method of making information publicly available is publishing it in the press of a coverage area relevant for the document. This requirement is met if a notice is placed in at least one periodical that meets the criterion of "coverage area relevant for the document". The term "the press" means all periodicals published in Poland and includes weeklies, monthlies and dailies. Thus, if the lawmaker requires an administrative authority to publish information "in the press of a coverage area relevant for the document", it means that at the same time the authority may freely select a type of periodical (a daily, weekly or

monthly) and the number of local periodicals where such a notice will be posted. Consequently, there is no doubt that the requirement of making information publicly available is met, when a notice is published in at least one periodical that meets the criterion of "coverage area relevant for the document".

According to the AARHUS CONVENTION (1998), the interested public has to be informed in an effective manner while Polish regulations only provide for making information publicly available and not for the effectiveness of provision of such information. In the opinion of the Aarhus Convention Compliance Committee, the lack of a provision setting forth a requirement of effective information is a breach of the Convention and the European Commission points out that even though directives do not require it explicitly, the obligation to transpose this provision results directly from the AARHUS CONVENTION (1998), which is part of the EU legislation. If provisions of the AARHUS CONVENTION (1998) that pertain to effective notification are adopted, they could form basis for the differentiation of methods used to inform the public depending on the type of community and customs of its inhabitants. Thus, the authority may and even should look for means to disseminate information different from those specified in the act.

According to the WATER LAW (2017), active access to information upon request of stakeholders pertains to source materials used to develop plans. Art. 12 of the ACCESS TO INFORMATION ON ENVIRONMENT ACT (2008) provides that as a general rule information is made available upon written request. Request for information triggers administrative proceedings a party to which is the person requesting information. This conclusion may be drawn from Art. 20(1) of the ACCESS TO INFORMATION ON ENVIRONMENT ACT (2008) where a form of administrative decision refusing access to information is specified. Article 4 of the ACCESS TO INFORMATION ON ENVIRONMENT ACT (2008) says that information should be made available to "everyone", which may lead to a conclusion that legal capacity is not a condition necessary to request information relating to the environment. Because of this, one can assume that every person, irrespective of their legal capacity, may request information that does not involve retrieving it and may be given orally without a need to file a written request.

Initially, spatial information required for the flood risk assessment was published by the Institute of Meteorology and Water Management (IMGW) in such periodicals as Hydrological Yearbooks of surface waters and Statistical Yearbooks of groundwater. At present, the IMGW maintains an electronic database of hydrological historical data that contain data collected since 1971, and for some rivers, since 1951. The next stage in the field of the access to hydrological data is the possibility to use Geographic Information System (GIS). One of the essential features of the GIS system is the capability of integrating information from different sources, saved in different systems and using different coordinate systems, acquired in different periods with diverse levels of detail and accuracy. Owing to such integration, various pieces of information become useful for spatial analyses. The integration involves the bringing of data to a common coordinate system, which includes an ellipsoid as a reference surface. Data sources for the GIS are digital and analogue maps, where analogue maps are digitized using scanning and vectorization. Additional data sources for the GIS are aerial pictures and satellite images. Geographic or topographic coordinates are introduced using so-called registration, which consists in achieving consistency with a map by identifying reference points that are common for the photograph and a map drawn to an appropriate scale (RADZUK, 2001).

In order to develop the system of hydrological data in Poland, the necessity to implement the INSPIRE DIRECTIVE (2007) was of the key importance. The most important reason to undertake legislative processes in order to develop the European spatial information infrastructure was connected with issues related to ensuring the high quality of spatial information, its accessibility and interoperability of systems; this constituted a serious difficulty for activities of public administration bodies. On the other hand, many spatial databases, distributed in different organisations, exist in the Member States. This may result in serious difficulties related to the access to complex, thematic information by administration bodies (WILKOWSKA-KOŁAKOWSKA, ZAKRZEWSKA, 2016)

At present, Poland is at the stage of development of the water management information system, being a part of the spatial information infrastructure, according to the new Water Law. The water management information system is maintained as a tele-information system. The system stores water management information concerning, for example, the hydrographic network; hydrological and meteorological measuring and observation stations; location of boundaries of drainage areas and river basins; volumes and the quality of groundwater resources, including accessible groundwater resources, location of basic groundwater reservoirs. According to Art. 330 item 1 WATER LAW (2017), the water management information system is maintained by the Polish Waters (Wody Polskie) for the country with consideration of division into river basins and water regions.

For data sets included in the water management information systems, as well as for related services, metadata concerning the spatial information infrastructure is developed which describes those data sets and services, according to Art. 5 SPATIAL INFORMATION INFRASTRUCTURE ACT (2010). Spatial data sets included in the water management information system are made available as services which are specified

in Art. 9 of the SPATIAL INFORMATION INFRASTRUCTURE ACT (2010). The Polish Waters maintain the Hydroportal, as a node of the national spatial information infrastructure, and the central access point to services, which are specified in Art. 9 SPATIAL INFORMATION INFRASTRUCTURE ACT (2010). Searching for information, making copies of documents and their transfer are maintained basing on provisions of the ACCESS TO INFORMATION ON ENVIRONMENT ACT (2008).

The legal instruments of flood risk management using the example of the Odra River basin

The Odra River basin is found in the west of Poland and has been divided into 4 regions. The area within the Oder River basin consists primarily of arable land (62% of the area), forests and semi-natural ecosystems (33%) while aquatic systems cover less than 2% of the basin area. The remaining areas fall to large urban agglomerations and heavily industrialized regions. In Poland, one of the largest floods was the one that occurred in the Odra River basin in 1997, also known as the Flood of the Millennium. In the first place, it claimed over 50 lives and caused serious damage to property. In the following years, both Europe and Poland experienced other floods that affected local communities and individual persons. Consequently, it is important to introduce such legal solutions and carry out such actual activities that reduce the risk of occurring adverse consequences of flood.

The procedure related to the determination of prevention, protection and information activities aimed at the limitation of consequences of flood has been divided into several stages. Based on the WATER LAW (2017), a preliminary assessment of flood risk, the flood risk maps, the flood hazard maps are developed and then used as the basis for the Flood Risk Management Plans. In the first place a preliminary flood risk assessment should be made. Using a preliminary assessment of flood risk, flood hazard maps and flood hazard maps are drawn. As stated in FLOODS DIRECTIVE (2017) flood hazard maps shall cover the geographical areas which could be flooded according to the following scenarios: (a) floods with a low probability or extreme event scenarios; (b) floods with a medium probability (likely return period ≥ 100 years); (c) floods with a high probability, where appropriate. Flood risk maps shall show the potential adverse consequences associated with flood scenarios referred to in paragraph 3 and expressed in terms of the followings: (a) the indicative number of inhabitants potentially affected; type of economic activity of the areas potentially affected; (c) installation as referred to in Annex I to Council Directive 96/61/EC (...); (d) other information which the Member State considers useful such as the indication of areas where floods with a high content of transported sediments and debris floods can occur and information on other significant sources of pollution. As it stems from Art. 176 WATER LAW (2017), a competent authority should develop the Flood Risk Management Plans using maps as its basis. Thus, documents are accepted at individual stages of the procedure where the said documents are interrelated so that maps are drawn based on information found in the preliminary assessment while the Flood Risk Management Plan is developed using maps as the basis. According to a strict interpretation of Art. 172(1) WATER LAW (2017), it may be assumed that the lawmaker does not provide for any additional documents that along with the maps would act as a source of data necessary to develop the Flood Risk Management Plans. According to Art. 173(8) WATER LAW (2017), interested parties may submit written remarks regarding arrangements found in the draft plans to the minister responsible for water management within 6 months of making draft Flood Risk Management Plans available to the public. It should be stressed that only written remarks are acceptable, which means that this regulation is different from the solution employed for submitting remarks and applications based on the ACCESS TO INFORMATION ON ENVIRONMENT ACT (2008) where remarks and applications may be filed in a written form or orally for the record as well as using electronic means of communication.

The Flood Risk Management Plan for the Odra River Basin was adopted under the regulation of the Council of the Ministers dated 18 October, 2016. Although the complete procedure of developing the Flood Risk Management Plans for the Odra River basin was carried out under the WATER LAW (2001), the rules of public consultations applicable to individual documents remained unchanged in the WATER LAW (2017). Consequently, using the procedure employed to develop the Flood Risk Management Plans as an example, one can draw conclusions regarding the incorrect transposition of the FLOOD DIRECTIVE (2007), first in the WATER LAW (2001) and then in the WATER LAW (2017). The public consultations for the Flood Risk Management Plans were carried out between 22 December, 2014, and 22 June, 2015. Within the consultation period, there were filed 269 remarks to which answers were provided by specialists working on the Flood Risk Management Plan. Local government units referred to the fact that engineering activities planned for their districts and often only locally limiting consequences of floods need to be included in the Flood Risk Management Plan. Remarks of NGO's pertained mainly to activities related to environmental protection and then focused on safety and protection of human health. The proposals suggested that non-engineering solutions should be implemented on a larger scale and combined with abandonment of traditional engineering solutions (due to possible damage to the environment).

In the conclusions from the public consultations, in the first place it should be stressed that many remarks were considered irrelevant, mainly because they referred directly to flood hazard maps and activities proposed to be carried out on water-courses, which according to the preliminary assessment were not marked for analysis within the first planning cycle as no maps were available for them. Remarks often touched the issue of determining conditions of land development on areas exposed to particular flood hazard. Considering the fact that conditions of land development, particularly those specified in the local land development plan, should be determined as a community own task, it should be stressed that local governments should limit building development on flood-endangered areas.

In Art. 176(6) of the WATER LAW (2017), a reference to stakeholders is found. It should be noted that stakeholders should be divided into two basic groups. The first group includes institutions and authorities interested in arrangements found in the Flood Risk Management Plan or participating in decisions regarding such arrangements while the other group comprises private entities: NGO's, environmental organizations, and natural persons. Addressees of the information campaign have been divided into four groups: 1) decision-making partners - institutions or organizations whose representatives worked in steering committees or planning groups of aquatic regions and the basin; 2) units participating in the consultations - institutions or organizations that were partners in the process of public consultations; 3) inhabitants and users of endangered areas and other people who may suffer consequences of floods; 4) other interested persons: experts and persons interested in issues related to flood protection.

Within the consultations, conferences and meetings with the interested parties were held. Conferences were organized in order to disseminate information about the Flood Risk Management Plan and involve the interested parties in the process of consultations. The consultation meetings were a form of consultation on the level of river basins and aquatic regions and were aimed at the verification of occurring problems, discrepancies, and remarks to draft Flood Risk Management Plan drawn up the experts. Also expert meetings were considered as a form of public consultations: meetings of the Steering Committees and Planning Groups for River Basins as well as the Aquatic Forum, which was held on 9-10 June, 2015, in Warsaw. Polish law does not provide for public consultations at the stage of the initial assessment of flood risk. This stage should include the collection of historical information about floods, and assessment of potentially adverse consequences of future floods and their impact on lives and health of people, environment, cultural heritage, and business activity. As far as these issues are concerned, it is not known why the lawmaker has not made provision for consultations with environmental organizations, monument protection organizations, and businessmen who carry out their activities within the river basin. It should be stressed that absence of such consultations is also contrary to provisions of the Aarhus Convention, a party to which is Poland. According to the Convention, public consultations should be carried out at a stage when all optional solutions of the planned document are still available. Unfortunately, under Polish law, public consultations may be arranged only in relation to a draft Flood Risk Management Plan. This is in the situation where Flood Risk Management Plans are drawn up based on flood risk maps, which in turn are developed based on a preliminary assessment, for which no public consultations are organized.

Particular attention should be drawn to the absence of statutory obligation to ask local government bodies for opinions for the purpose of the preliminary risk assessment. Such bodies may submit their remarks only at the draft Flood Risk Management Plans stage and then it turns out that some arrangements cannot be changed because they have not been included in the preliminary assessment and the maps used for the development of the Flood Risk Management Plans. Additionally, considering the role of local governments in the land development process, it should be recommended that local governments be involved in providing opinions on the preliminary risk assessment. It is local governments that adopt local development plans where limitations on building development on flood-endangered areas may be imposed. For this reason, local governments are an important partner when it comes to determine activities aimed at the limitation of adverse effects of floods. Public consultations and access to spatial information are an important tool for prevention, protection and information activities aimed at the limitation of probability and risk of flood. It is assumed that in order to be fully efficient spatial planning and water management should be integrated. Investment in water management infrastructure (including flood control activities) may not be only an addition to the spatial development plans. The aim should be to integrate the activities of water management, spatial planning and environmental protection (SZEWRĄŃSKI et al., 2015).

Summary and conclusions

The effectiveness of flood risk managements highly depends on the access to information concerning flood hazards. The WATER LAW (2017) introduced important modifications in the field of ensuring the access to public information in flood risk management. The basic modification is the establishment the water management information system in Poland, maintained within the spatial information infrastructure. Information included in this system will be used by both, the public

administration bodies, as well as interested parties and individuals. The access to the wide extent of water management data, within the spatial information infrastructure, may also be of key importance for ensuring wide public consultations in the flood risk management process.

Informing the society about planned operations aiming at reduction of negative flood results, collecting opinions to planned documents and, finally, the access to information about approved documents, may lead to positive behaviour of particular individuals and institutions when the flood hazards become real. The access to water management information through tele-information networks is very important in the case of information operations directed towards the society. Therefore modifications introduced by the WATER LAW (2017) should be assessed as positive.

At the same time, when consultations performed for the flood risk management plan for the Odra River basin are evaluated, it should be also positively assessed that they were not limited to collection of opinions from the society. An important component of those consultations were direct meetings with interested individuals, when information could be transferred and public debates could be organised. The analysis of comments presented by local government bodies allows to consider that a serious problem is caused by the lack of obligation to perform public consultations at the stage of the preliminary assessment of the flood risk. Local government bodies, submitting opinions and comments, were informed that those opinions and comments could not be considered since they concerned documents approved at the early stage of resolving issues related to the flood risk. Following recommendations that the public participation should be ensured possibly at the earliest stage of planning operations aiming at mitigation of negative flood results, modifications concerning organisation of public consultations at the stage of development of the preliminary flood risk assessment should be introduced in the WATER LAW (2017).

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