



Republika Srbija
Ministarstvo rudarstva i energetike
Ministarstvo poljoprivrede i zaštite životne sredine



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IZGRADNJA POSTROJENJA I PROIZVODNJA ELEKTRIČNE/TOPLLOTNE ENERGIJE IZ HIDROGEOTERMALNIH IZVORA U REPUBLICI SRBIJI

Vodič za investitore

CONSTRUCTION OF PLANTS AND ELECTRICITY/ HEAT GENERATION FROM HYDRO-GEOTHERMAL SOURCES IN THE REPUBLIC OF SERBIA

Guide for investors

Juni 2016.

Treće izdanje, juni 2016.

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Uz podršku: Programa Ujedinjenih nacija za razvoj

Drugo izdanje, februar 2013.

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Uz podršku: Programa Ujedinjenih nacija za razvoj

Prvo izdanje, novembar 2010.

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Uz podršku: GTZ i USAID

Third Edition, June 2016

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Supported by: United Nations Development Programme

Second Edition, February 2013

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First Edition, November 2010

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Supported by: GTZ and USAID

Srpski

English





**IZGRADNJA POSTROJENJA I PROIZVODNJA
ELEKTRIČNE/TOPLLOTNE ENERGIJE IZ
HIDROGEOTERMALNIH IZVORA U REPUBLICI SRBIJI**

Vodič za investitore

- izmenjena i dopunjena verzija 2016 -

IZGRADNJA POSTROJENJA I PROIZVODNJA ELEKTRIČNE/TOPLLOTNE ENERGIJE IZ HIDROGEOTERMALNIH IZVORA U REPUBLICI SRBIJI

Vodič za investitore

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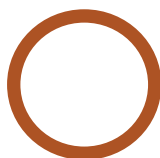
Legenda oznaka u šematskim prikazima koraka prikazanih procedura



Oznaka za zahtev koji podnosi investitor nadležnim organima, ovlašćenim organizacijama, telima ili privrednim subjektima



Oznaka za pitanje, koje se otvara u postupku



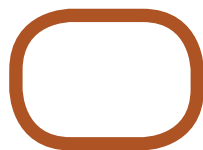
Oznaka za uslove i ulazne elemente dozvole, odnosno akta koji je predmet razmatranja



Oznaka za pozitivnu aktivnost nadležnog organa, odnosno ovlašćenih organizacija, tela ili privrednih subjekata



Oznaka za ostale korake u konkretnoj proceduri



Oznaka za upravni akt koji je rezultat sprovedenog postupka

Predgovor

Program Ujedinjenih nacija za razvoj (UNDP), kao implementaciona agencija Globalnog fonda za zaštitu životne sredine (GEF), sprovodi u partnerstvu sa Ministarstvom rudarstva i energetike i Ministarstvom poljoprivrede i zaštite životne sredine Republike Srbije GEF Projekat: „Smanjenje barijera za ubrzani razvoj tržišta biomase u Srbiji“.

Cilj Projekta je da se poveća udeo energije iz obnovljivih izvora u energetsom bilansu Srbije, odnosno udeo biomase u proizvodnji energije.

Jedna od aktivnosti projekta je izgradnja kapaciteta svih aktera za identifikaciju, pripremu, finansiranje, izgradnju i upravljanje bankabilnim projektima korišćenja obnovljivih izvora energije u okviru koje je izvršena revizija šest postojećih zastarelih vodiča za investiture u postrojenja koja koriste obnovljive izvore energije:

1. IZGRADNJA POSTROJENJA I PROIZVODNJA ELEKTRIČNE/TOPLLOTNE ENERGIJE IZ BIOMASE U REPUBLICI SRBIJI
2. IZGRADNJA POSTROJENJA I PROIZVODNJA ELEKTRIČNE ENERGIJE U MALIM HIDROELEKTRANAMA U REPUBLICI SRBIJI
3. IZGRADNJA POSTROJENJA I PROIZVODNJA ELEKTRIČNE ENERGIJE U VETROELEKTRANAMA U REPUBLICI SRBIJI
4. IZGRADNJA POSTROJENJA I PROIZVODNJA ELEKTRIČNE/TOPLLOTNE ENERGIJE IZ HIDROGEOTERMALNIH IZVORA U REPUBLICI SRBIJI
5. IZGRADNJA POSTROJENJA I PROIZVODNJA ELEKTRIČNE ENERGIJE U SOLARNIM ELEKTRANAMA U REPUBLICI SRBIJI
6. IZGRADNJA SOLARNIH GREJNIH SISTEMA U REPUBLICI SRBIJI

Svi vodiči su dvojezični i, izuzev jednog, izrađeni su u dve verzije. U šest detaljnih vodiča opisane su celokupne složene procedure za izgradnju postrojenja i obavljanje delatnosti proizvodnje energije iz konkretnih obnovljivih izvora, uz upućivanje na odgovarajuće propise i navođenje nadležnih institucija. Detaljni vodiči namenjeni su, pre svega, investitorima i stručnjacima koji rade na razvoju projekata, ali i zaposlenima u različitim nadležnim državnim organima, s obzirom na međusektorski karakter procedura. U pet kratkih vodiča ova složena problematika prikazana je manje detaljno i na slikovit način, čime se tema približava i širem krugu zainteresovanih strana.

Cilj izrade vodiča bio je da se podstaknu i pomognu investitori da ulažu u obnovljive izvore energije u Srbiji, ali i da se, kroz detaljno sagledavanje složenih procedura za izgradnju postrojenja i obavljanje delatnosti proizvodnje energije iz obnovljivih izvora, uoče njihovi nedostaci i da se podstaknu nadležni da kroz zakonodavne i institucionalne aktivnosti ove procedure pojednostave i unaprede. Nadamo se da će ovi Vodiči pokrenuti konstruktivni dijalog između mnogobrojnih zainteresovanih strana i time doprineti boljoj informisanosti i međusobnom razumevanju, što u krajnjoj liniji treba da rezultira povoljnim okruženjem za investicije u sektoru obnovljivih izvora energije.

I Energija iz geotermalnih izvora

- **Geotermalna energija predstavlja toplotu akumuliranu u suvim stenama i fluidima Zemljine kore, kao posledica neprekidnog zračenja toplote iz unutrašnjosti Zemlje**
- **Geotermalna energija, može biti:**
 - hidrogeotermalna energija - akumulirana u podzemnim vodama
 - petrogeotermalna energija - akumulirana stenskim masama

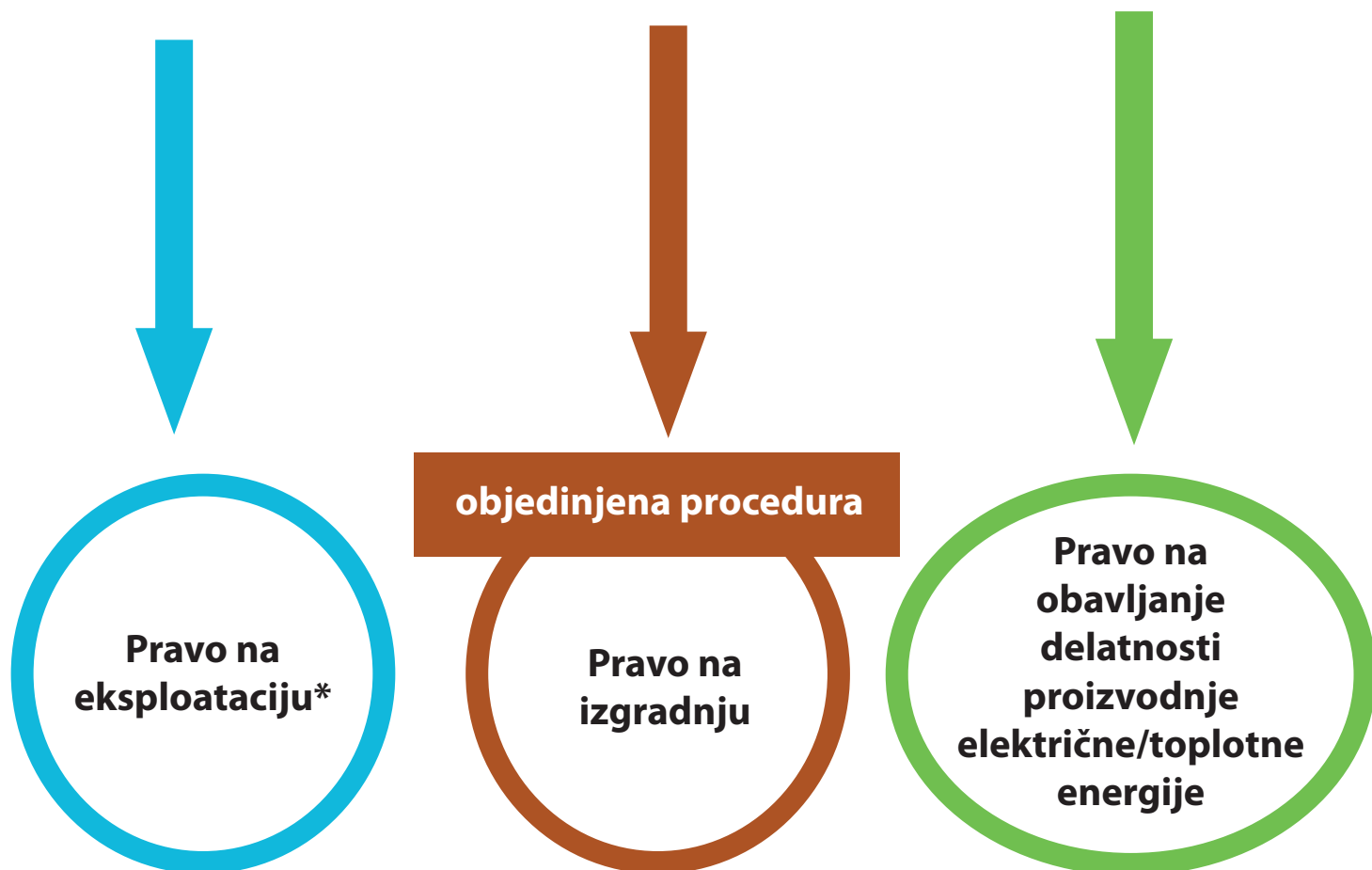
I Hidrogeotermalna energija

- **Hidrogeotermalna enegija je jedan od oblika obnovljivih izvora energije**
- **Hidrogeotermalna energija može da se koristi direktno, a može da se koristi i za proizvodnju toplotne energije i za proizvodnju električne energije**

NAPOMENA: Potrebno je ukazati da se ovaj Vodič odnosi na sva postrojenja na hidrogeotermalnu energiju i da su u njemu opisane procedure pred nadležnim organima i institucijama, ali da pojedini elementi ovih procedura, kao i sprovođenje pojedinih procedura zavisi od veličine objekta, mesta na kome se gradi objekat, konkretne tehnologije za proizvodnju energije i drugih karakteristika samog objekta za korišćenje hidrogeotermalne energije.

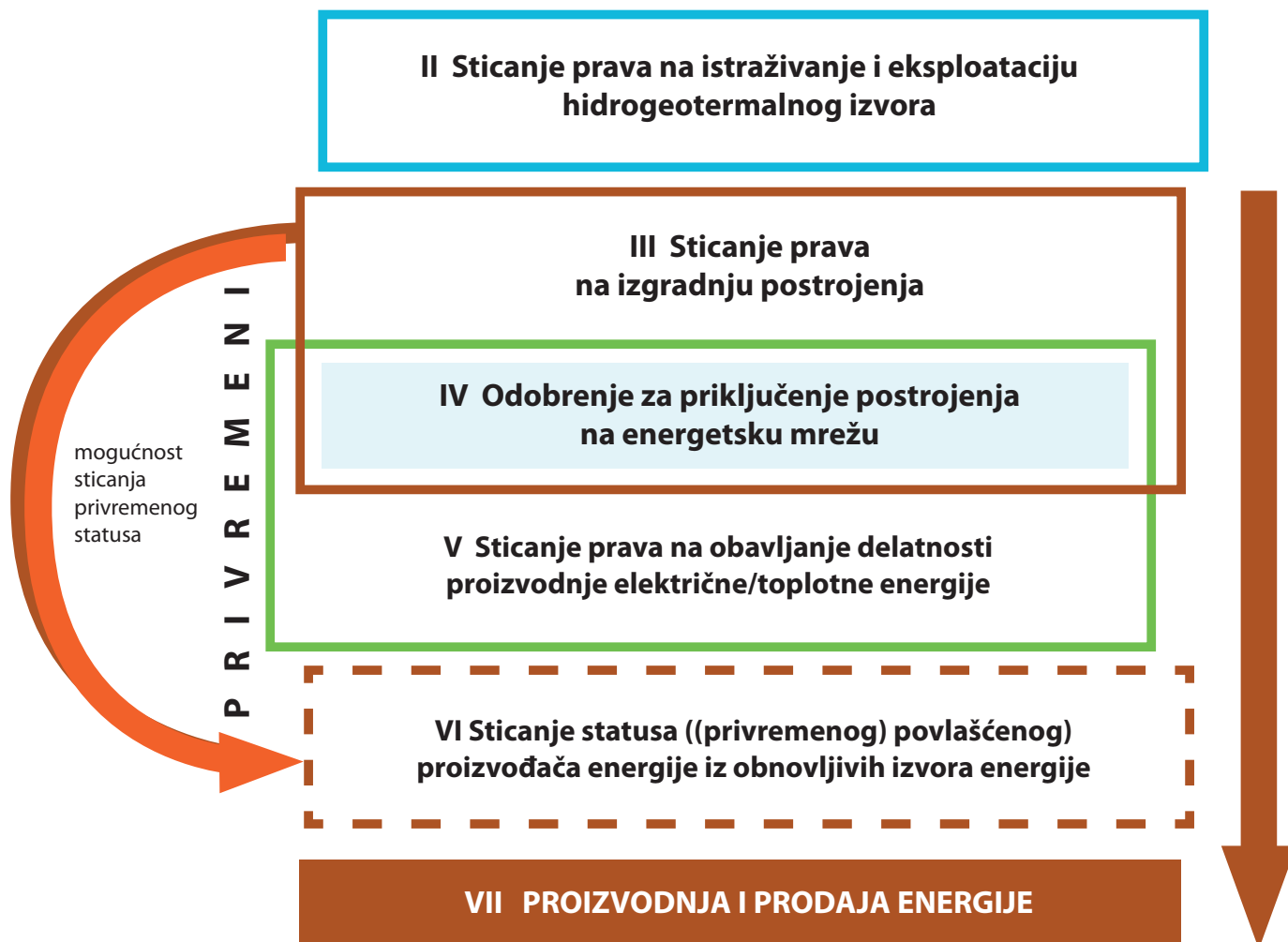
I Proizvodnja energije iz hidrogeotermalnih izvora

Investitor treba da stekne sledeća prava:



***NAPOMENA:** Može se steći na osnovu Zakona o rudarstvu i geološkim istraživanjima i na osnovu Zakona o javno-privatnom partnerstvu

I Osnovni koraci od ideje do korišćenja postrojenja



II Sticanje prava na istraživanje i eksploataciju hidrogeotermalnog izvora

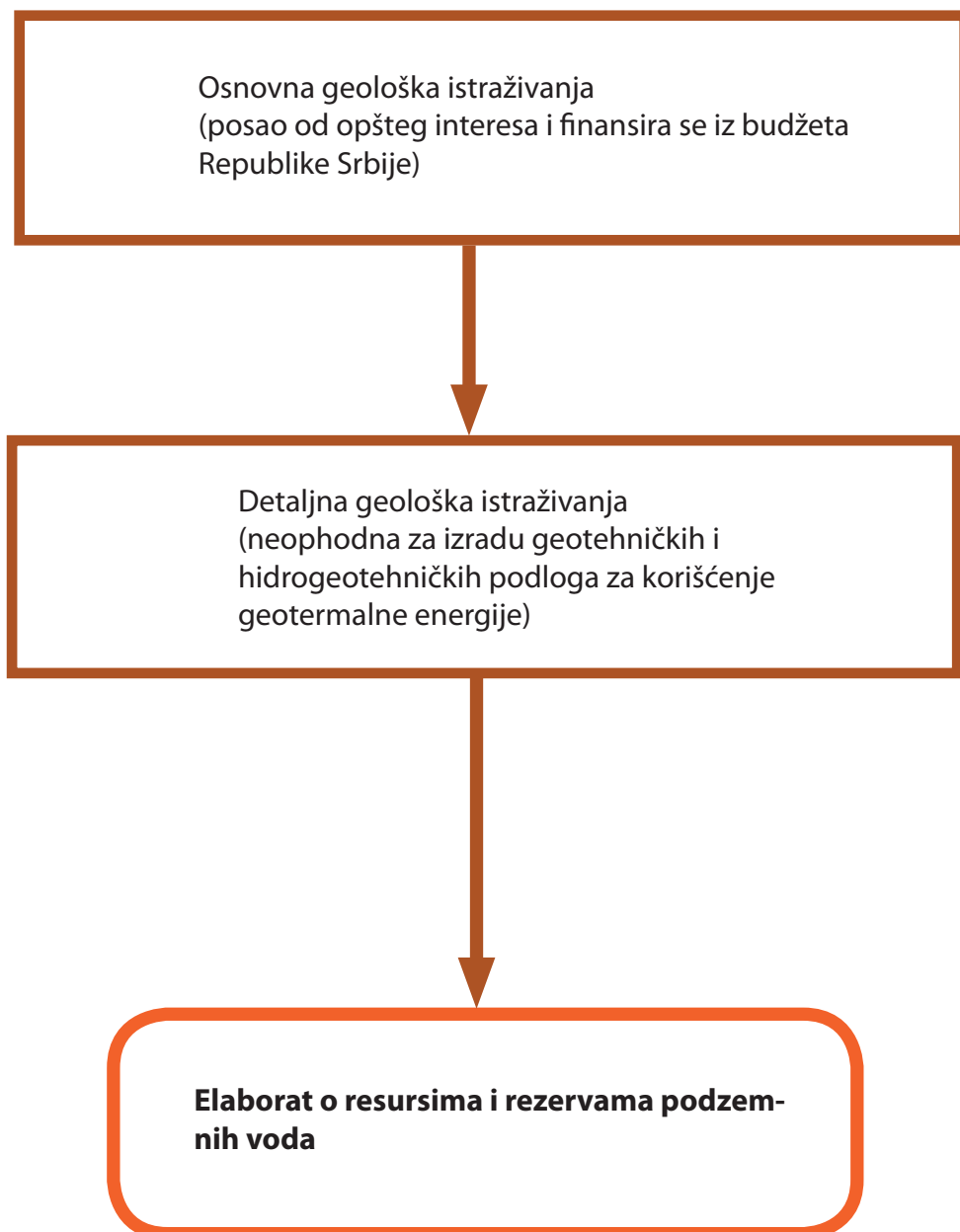
II Sticanje prava na istraživanje i eksploataciju hidrogeotermalnog izvora

- **I-1 Geološka istraživanja**
 - Projekat geoloških istraživanja
 - Odobrenje za geološka istraživanja
 - Klasifikacija podzemnih voda i geotermalnih resursa

- **I-2 Eksploatacija hidrogeotermalne energije***
 - Odobrenje za eksploataciono polje/Odobrenje za eksploataciju
 - Odobrenje za izgradnju rudarskih objekata/ za izvođenje rudarskih radova
 - Upotrebna dozvola za rudarske objekte
 - Licence prava rudarstva

II-1 Geološka istraživanja

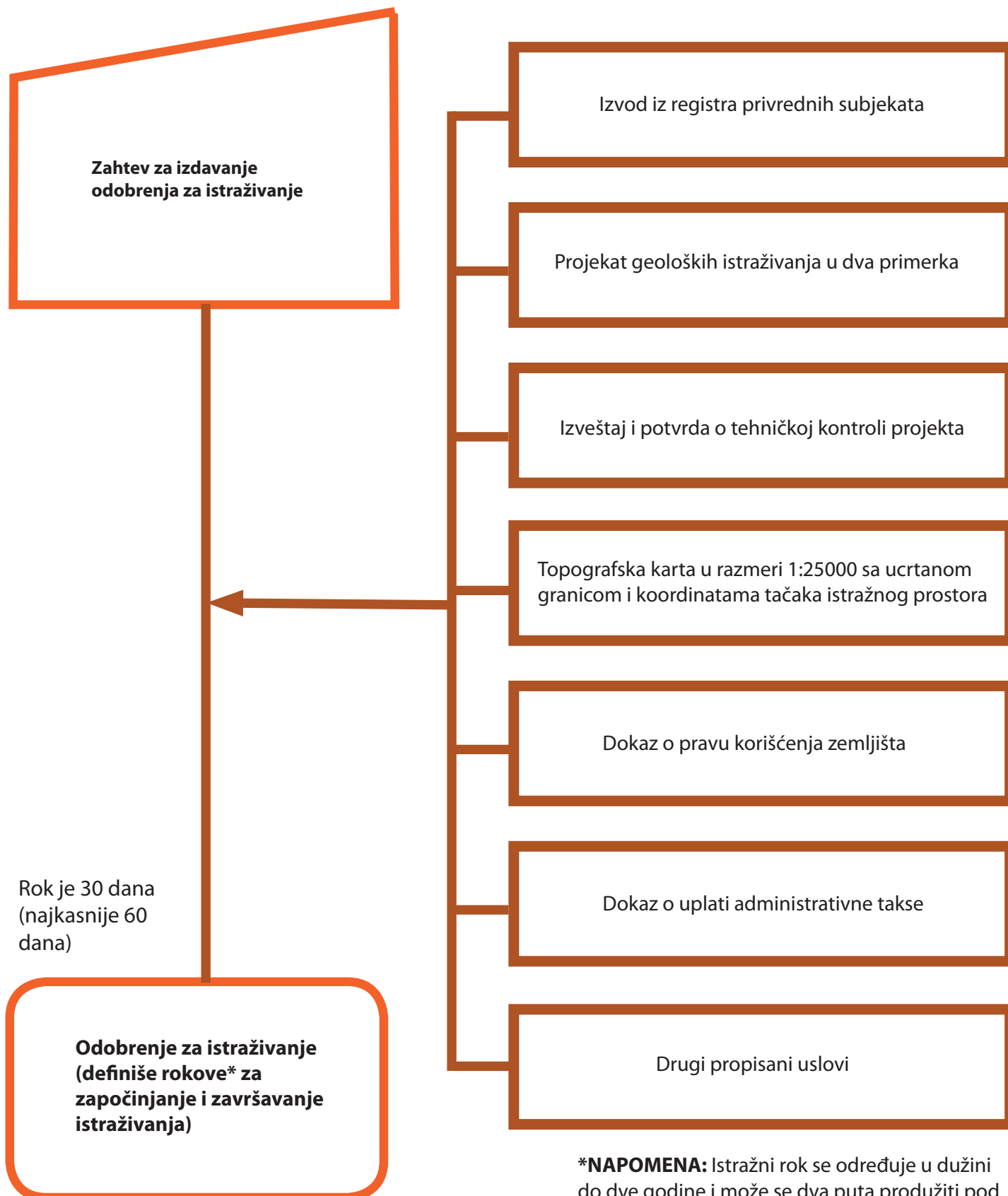
Geološka istraživanja se sprovode u cilju da se utvrdi hidrogeološki potencijal ležišta.



Elaborat između ostalog
sadrži:

- 1) podatke o geološkim i hidrogeološkim karakteristikama ležišta;
- 2) kvalitetu i količinama istraženih resursa podzemnih voda;
- 3) klasifikaciji resursa;
- 4) tehničkim mogućnostima i uslovima eksploatacije;
- 5) očekivanim ekonomskim efektima.

II-1 Odobrenje za geološka istraživanja



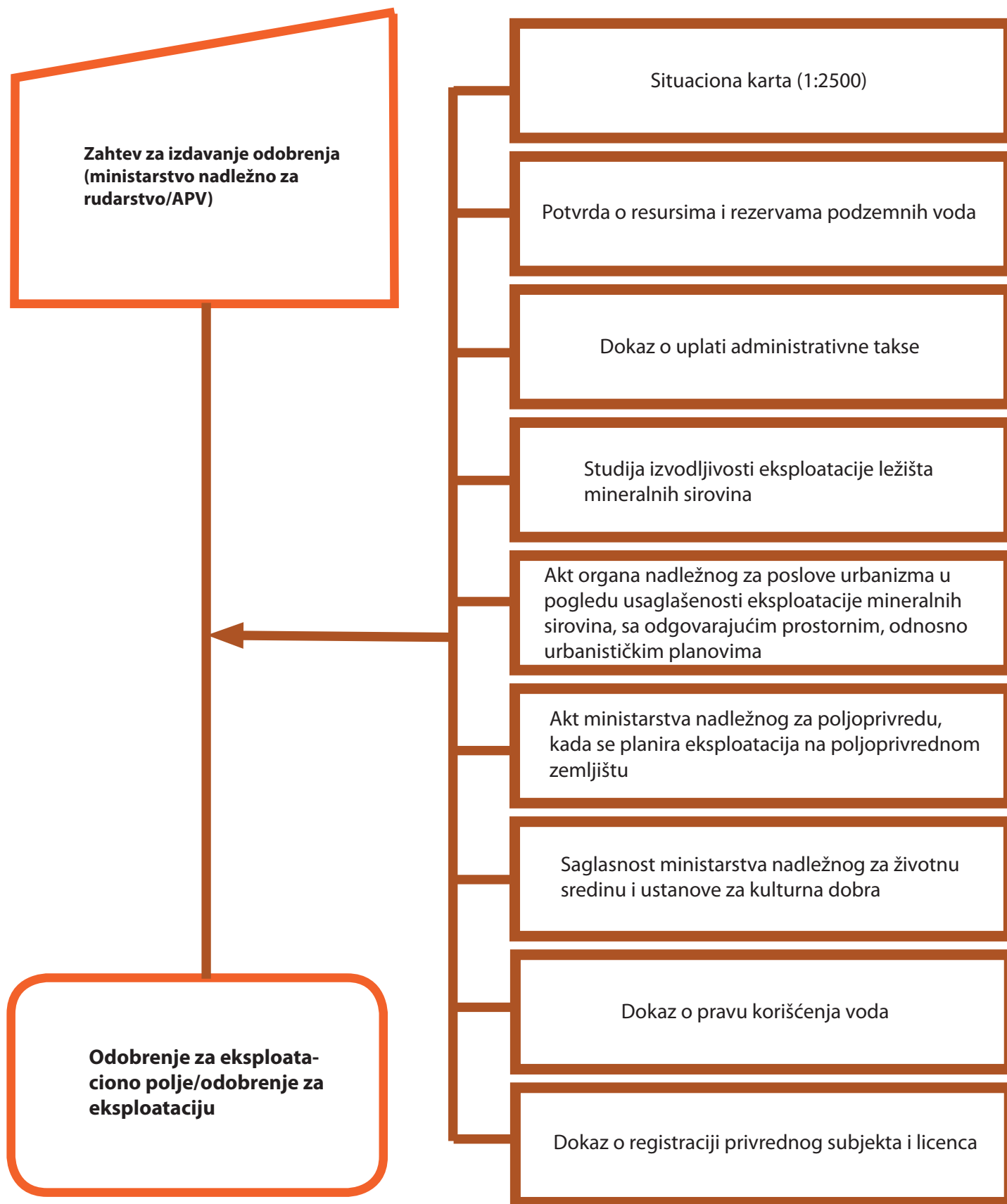
II-2 Eksploatacija hidrogeotermalne energije

Eksploatacijom hidrogeotermalne energije smatra se izvođenje rudarskih radova na pripremi, bušenju, eksploataciji i korišćenju hidrogeotermalnih resursa visoke entalpije.

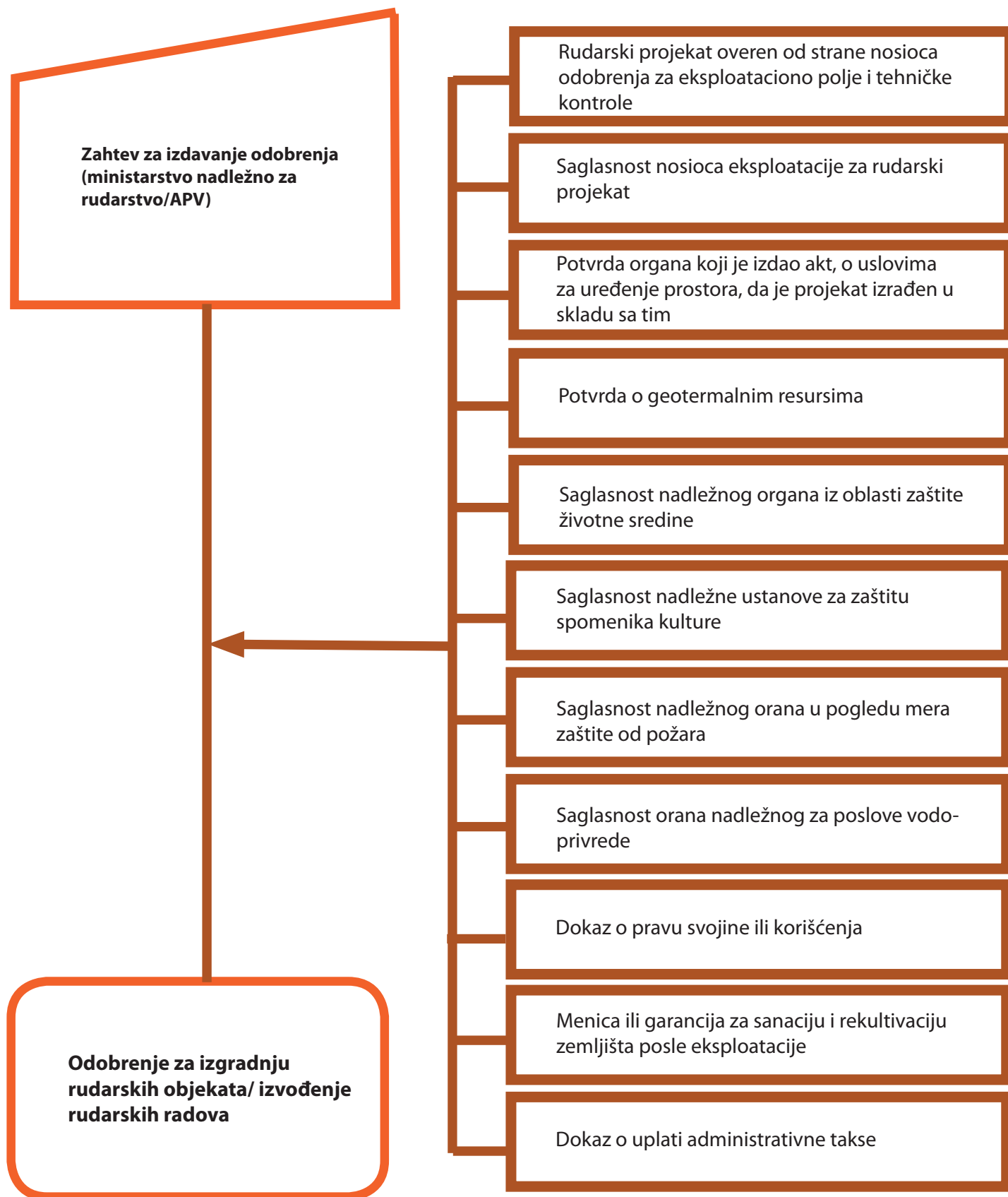


***NAPOMENA:** Shodno odredbama Zakona o rudarstvu iz 2015. godine, nema naknade za eksploataciju hidrogeotermalnih resursa

II-2 Odobrenje za eksploataciono polje/Odobrenje za eksploataciju



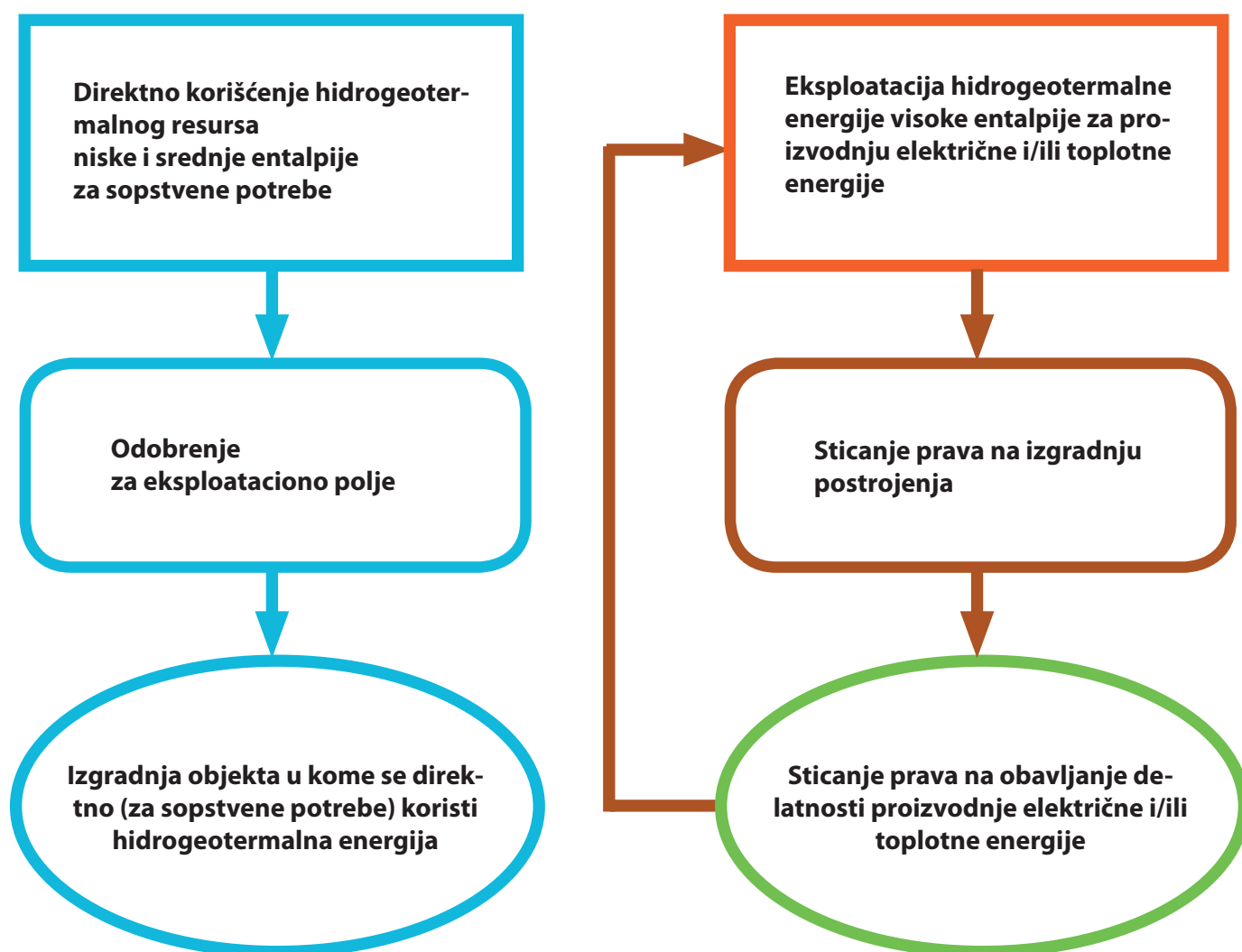
II-2 Odobrenje za izvođenje rudarskih radova/izgradnju rudarskih objekata



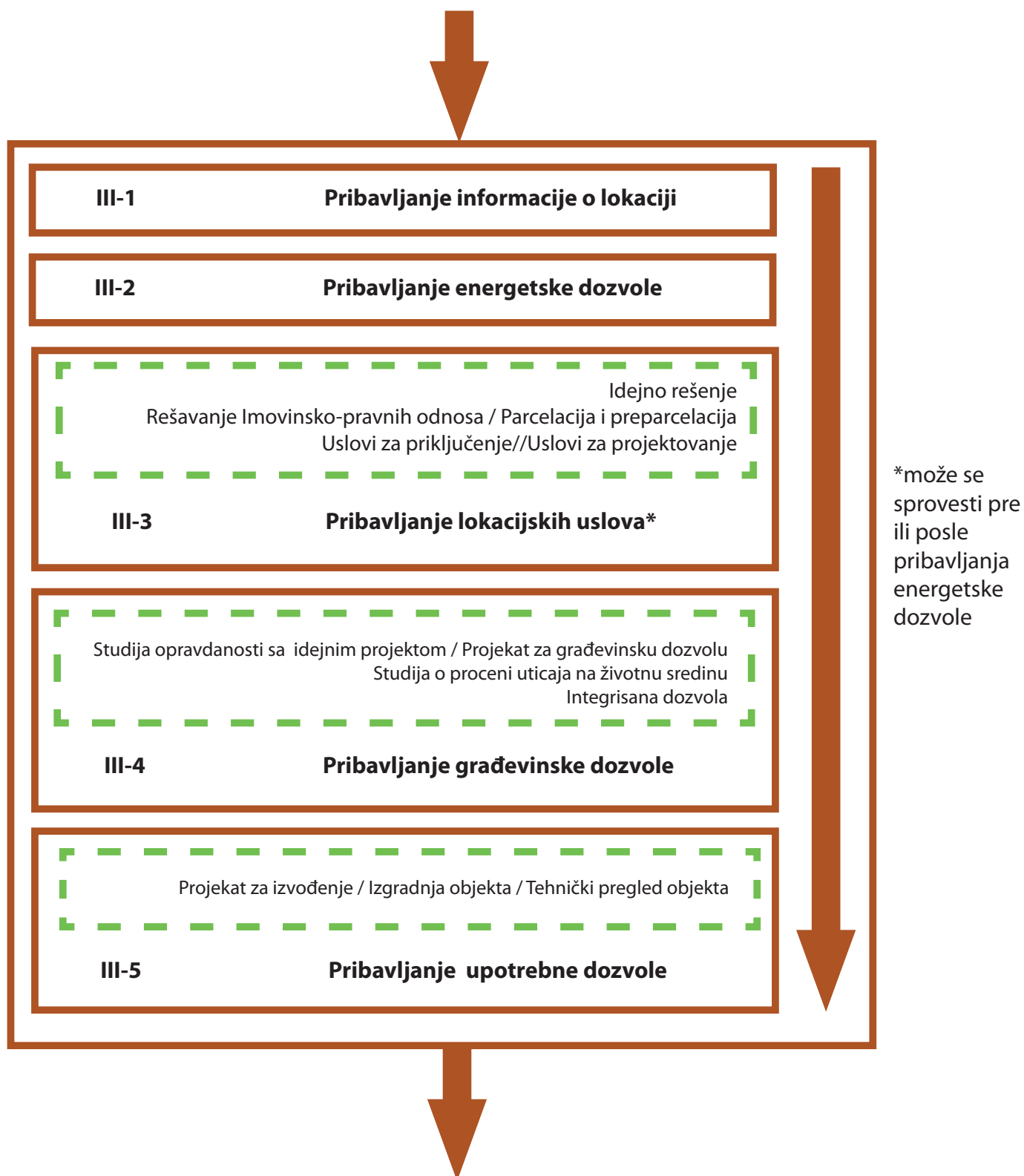
II-3 Rudarski objekti

- **Rudarski objekti su vezani neposredno za tehnološki proces istraživanja, eksploatacije i transporta podzemnih voda na eksploatacionom polju, kao i postrojenja i uređaji za eksploataciju (hidro) geotermalnih resursa ili drugih mineralnih sirovina cevnim sistemom i bušotinama**
- **Upotrebna dozvola za rudarske objekte je rešenje koje izdaje ministarstvo nadležno za poslove rudarstva i kojim se odobrava upotreba rudarskog objekta ili njegovog dela**

II Korišćenje: Eksploatacija hidrogeotermalne energije

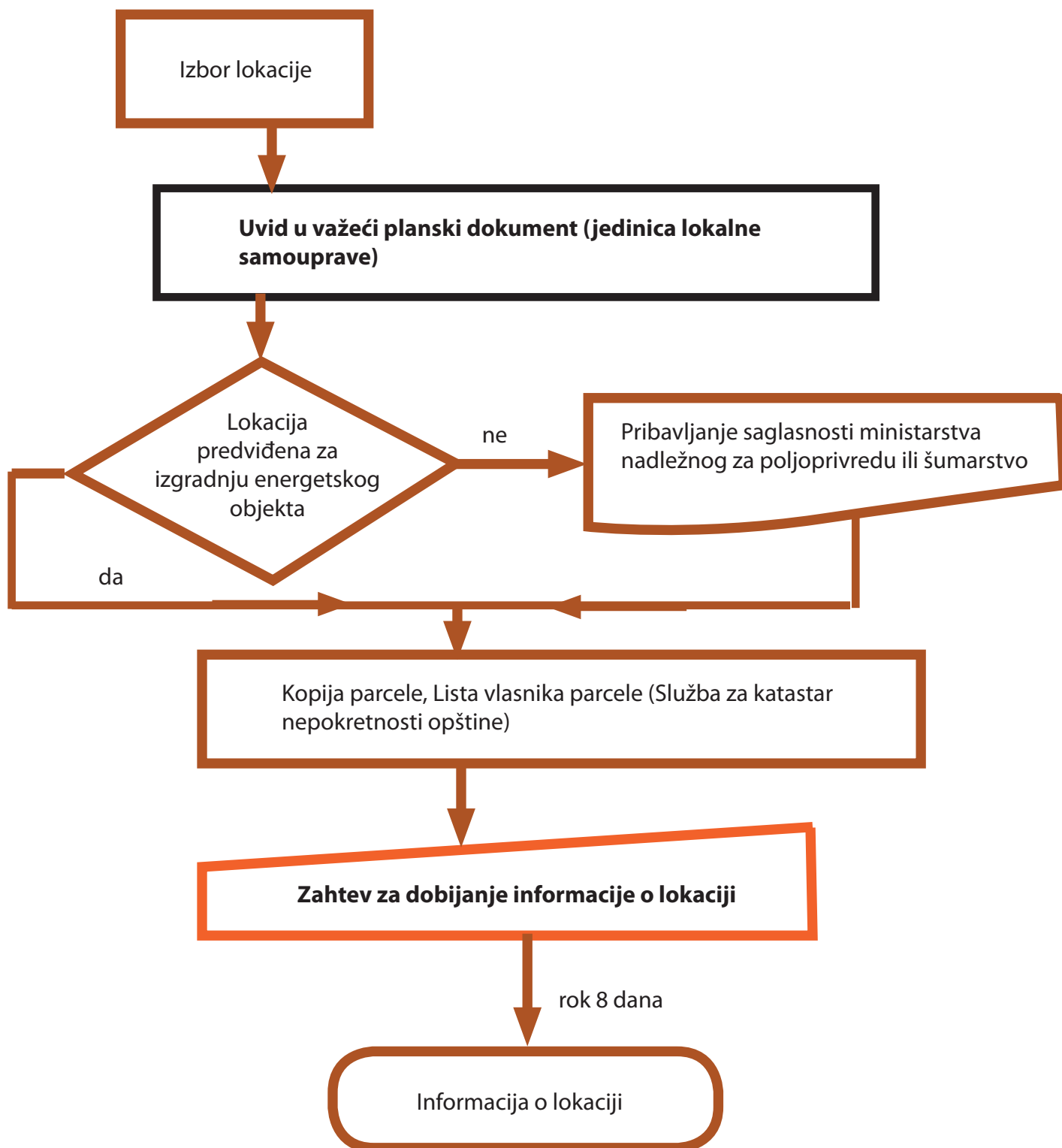


III Sticanje prava na izgradnju postrojenja



III-1 Izbor lokacije, uvid u važeća planska dokumenta i informacija o lokaciji

Analiza i izbor potencijalne lokacije za izgradnju postrojenja su prvi koraci, koji u značajnoj meri opredeljuju izradu tehničke dokumentacije za izgradnju postrojenja



II-2 Energetska dozvola

- **Energetska dozvola je akt neophodan za pribavljanje građevinske dozvole.**
- **Energetska dozvola nije potrebna za objekte snage manje od 1 MW.**

NAPOMENA: Energetska dozvola nije potrebna ukoliko se postrojenje gradi u formi javno-privatnog partnerstva ili koncesije



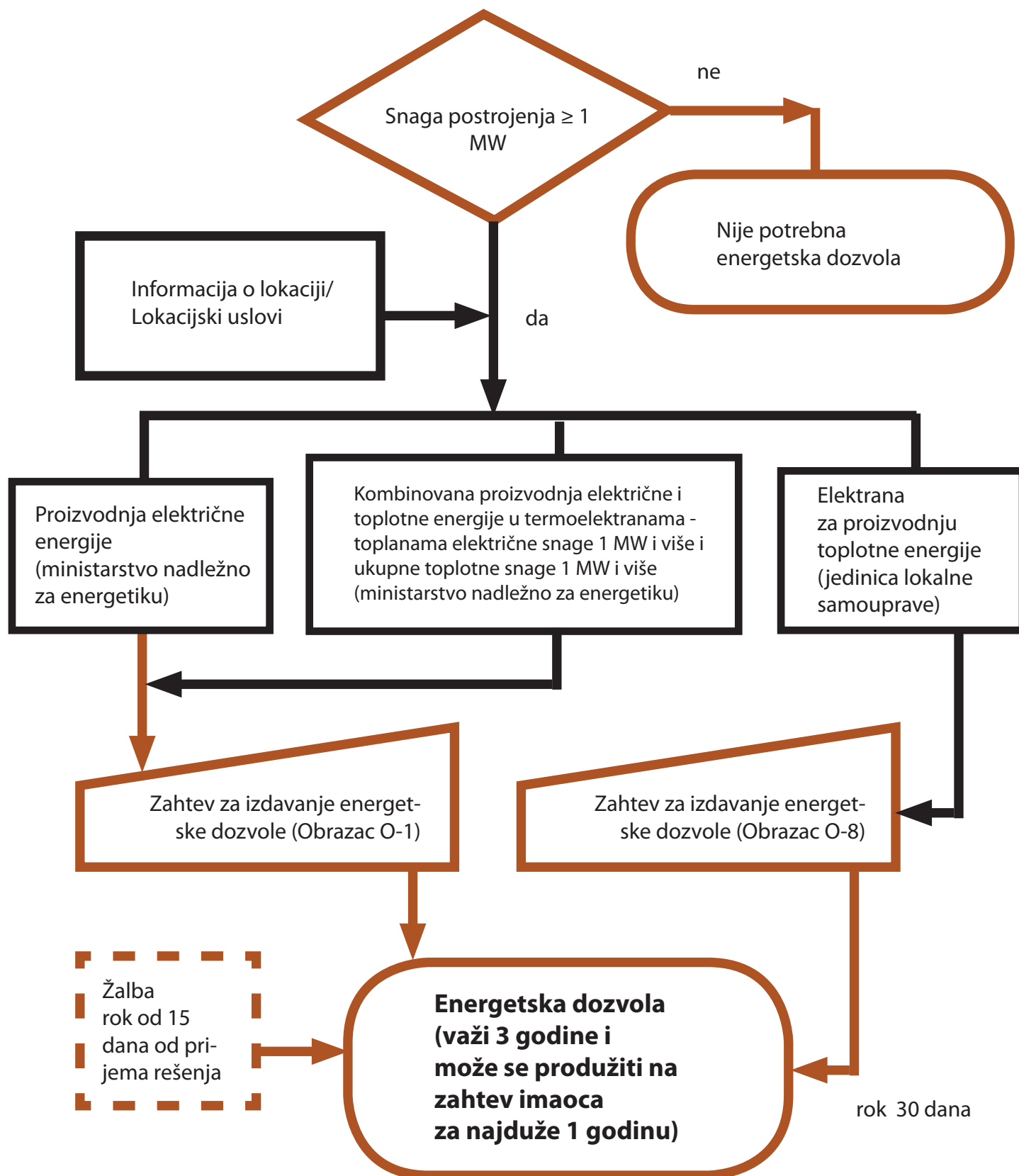
III-2 Mišljenje operatora sistema o priključenju energetskeg objekta na energetske sistem

- **Mišljenje operatora sistema o uslovima i mogućnostima priključenja energetskeg objekta na energetske sistem je akt neophodan za pribavljanje energetske dozvole.**
- **Zahtev:**
 - Podnosi se: operatoru sistema na čiji energetske sistem će se priključiti postrojenje, na propisanom obrascu.
 - Sadržaj zahteva: utvrđen aktima operatora sistema*.
 - Rok za izdavanje Mišljenja:
 - Prenosni sistem: 90 dana od datuma avansne uplate, na račun operatora prenosnog sistema, za izradu Studije priključenja objekta na prenosni sistem, a na osnovu Ugovora o izradi Studije priključenja.
 - Distributivni sistem: 30 dana od dana podnošenja zahteva.
 - Rok važenja: utvrđuje se u samom aktu.

Napomena: Izdavanje Mišljenja je utvrđeno u Pravilniku o energetskeg dozvoli, ali uslovi, postupak i način izdavanja ovog mišljenja nisu određeni propisima donetim od strane države, već od strane operatora sistema na čiji energetske sistem će se priključiti postrojenje.

*više na: www.ems.rs i www.eps.rs

II-2 Pribavljanje energetske dozvole



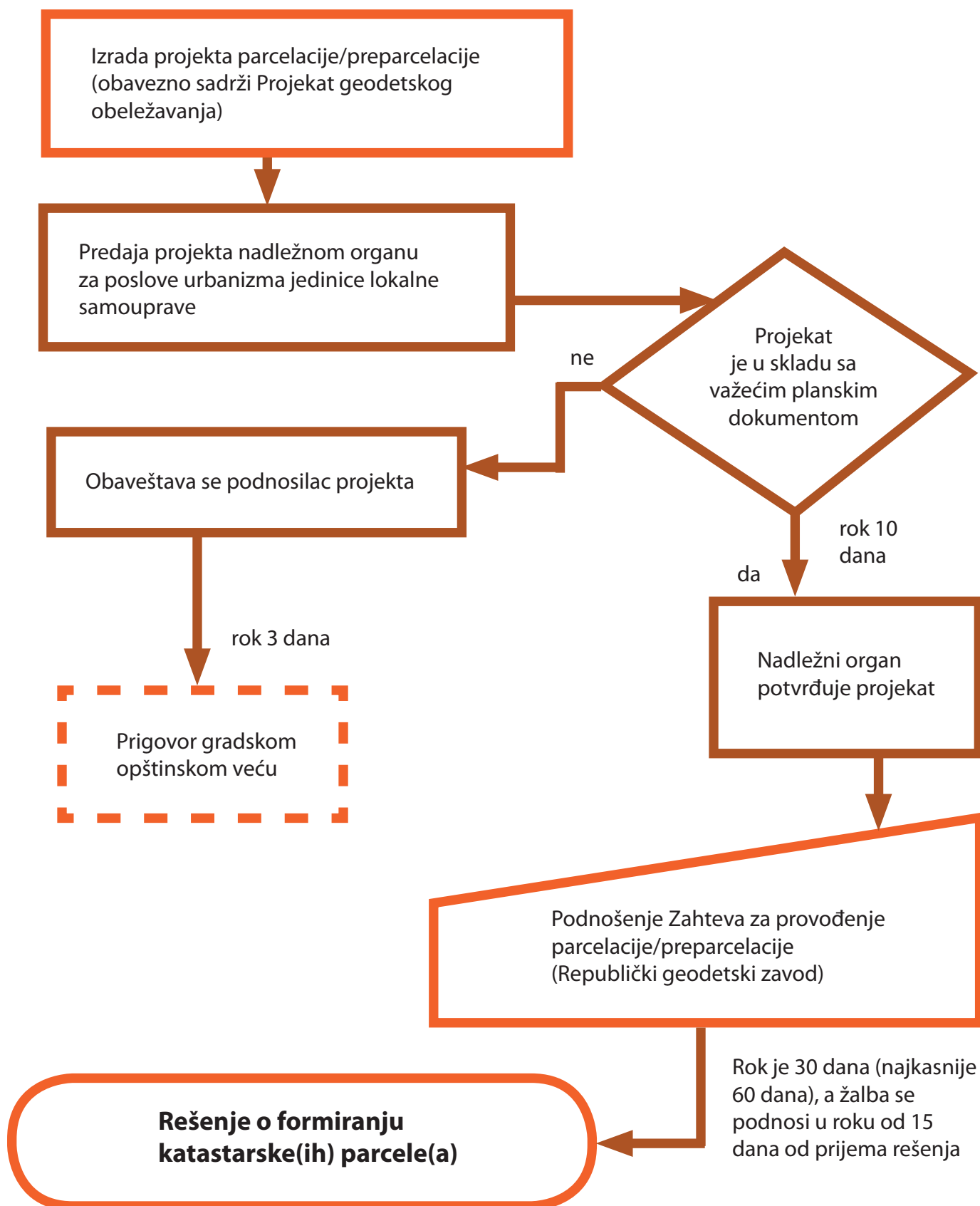
III-3 Lokacijski uslovi

Lokacijski uslovi sadrže sve uslove i podatke potrebne za izradu tehničke dokumentacije, pre svega projekta za građevinsku dozvolu, a u skladu sa važećim planskim dokumentom

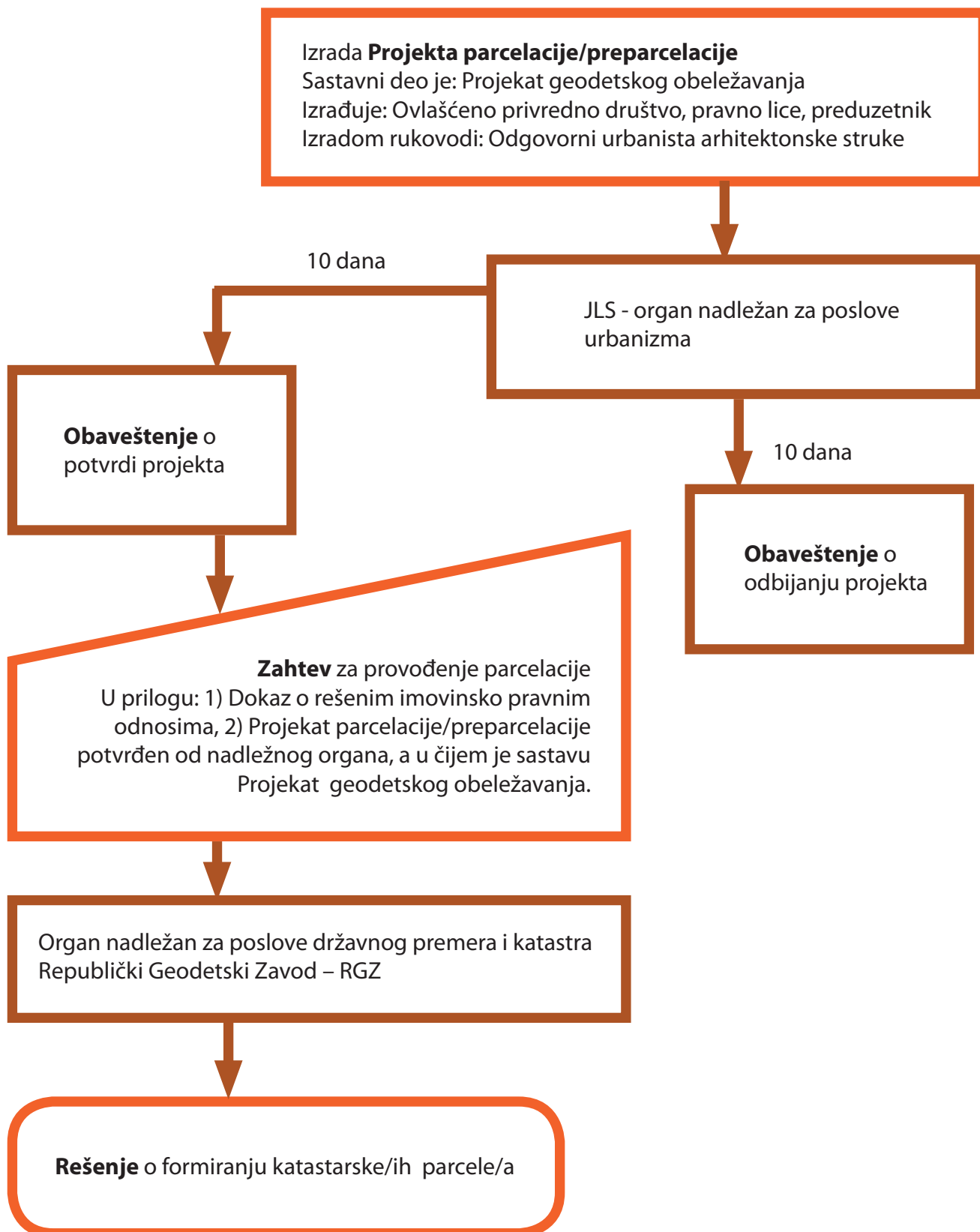


*NAPOMENA: Preporuka u cilju efkasnije izgradnje objekta

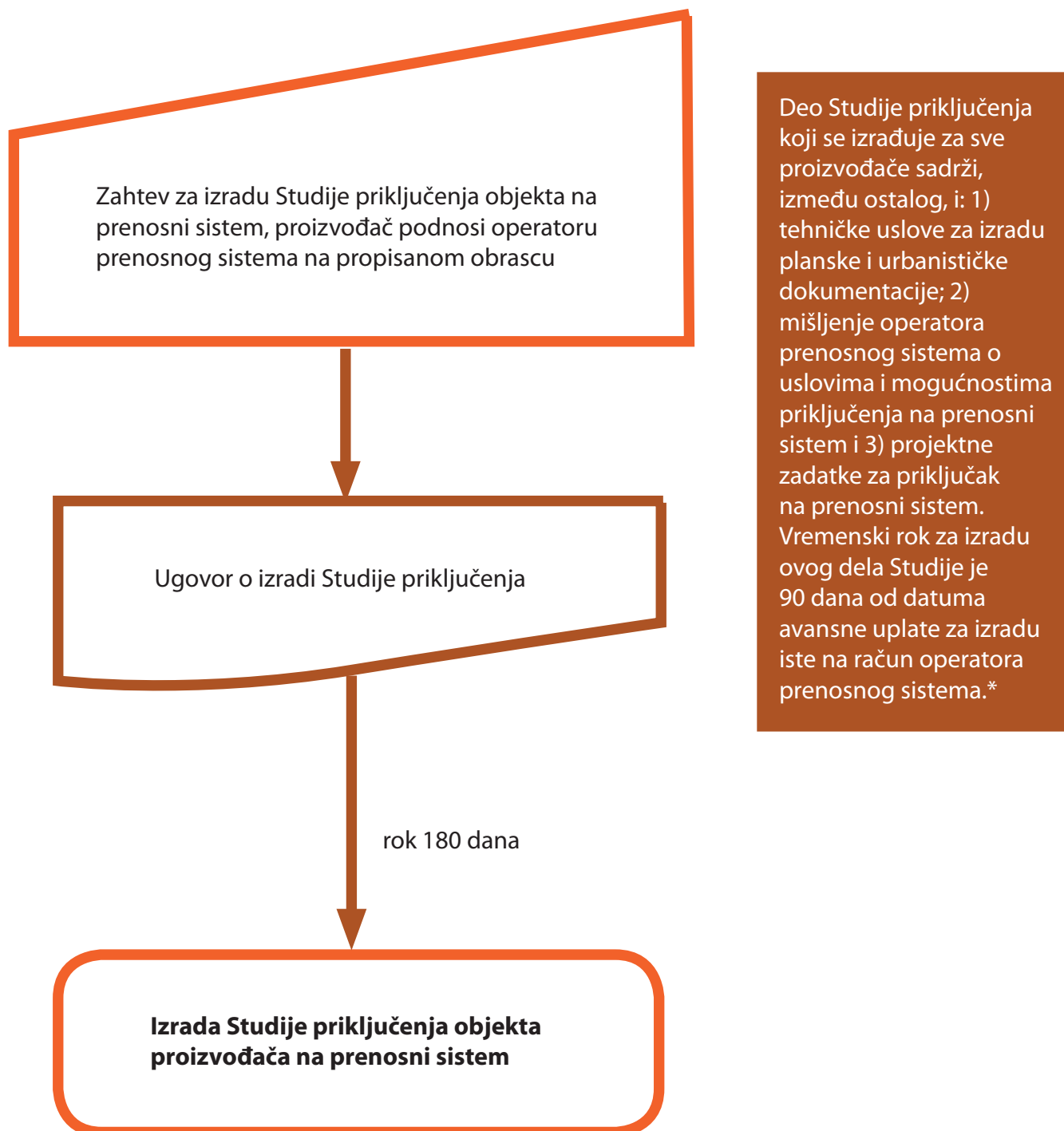
III-3 Formiranje građevinske parcele



III-3 Parcelacija/preparcelacija

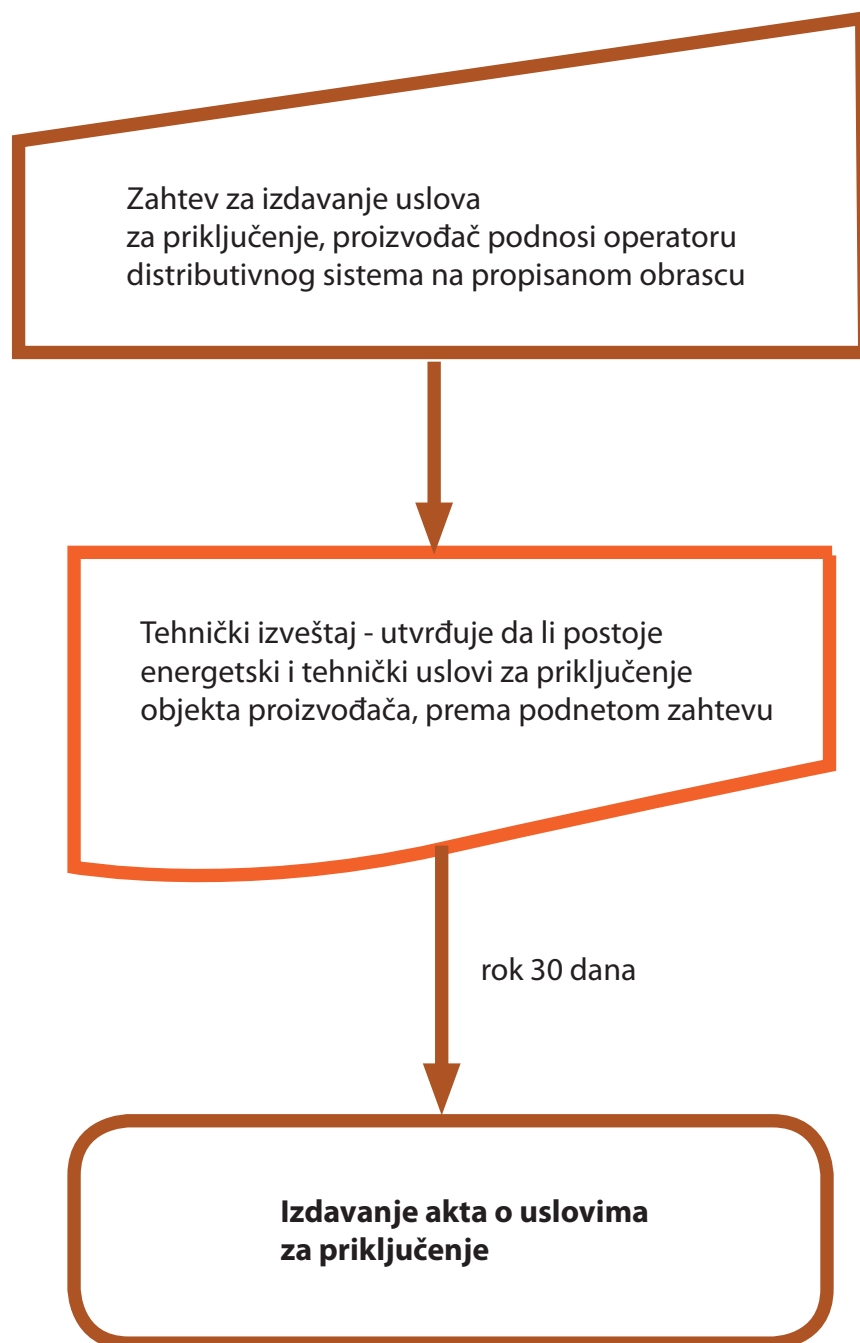


III-3 Uslovi za priključenje na prenosni sistem

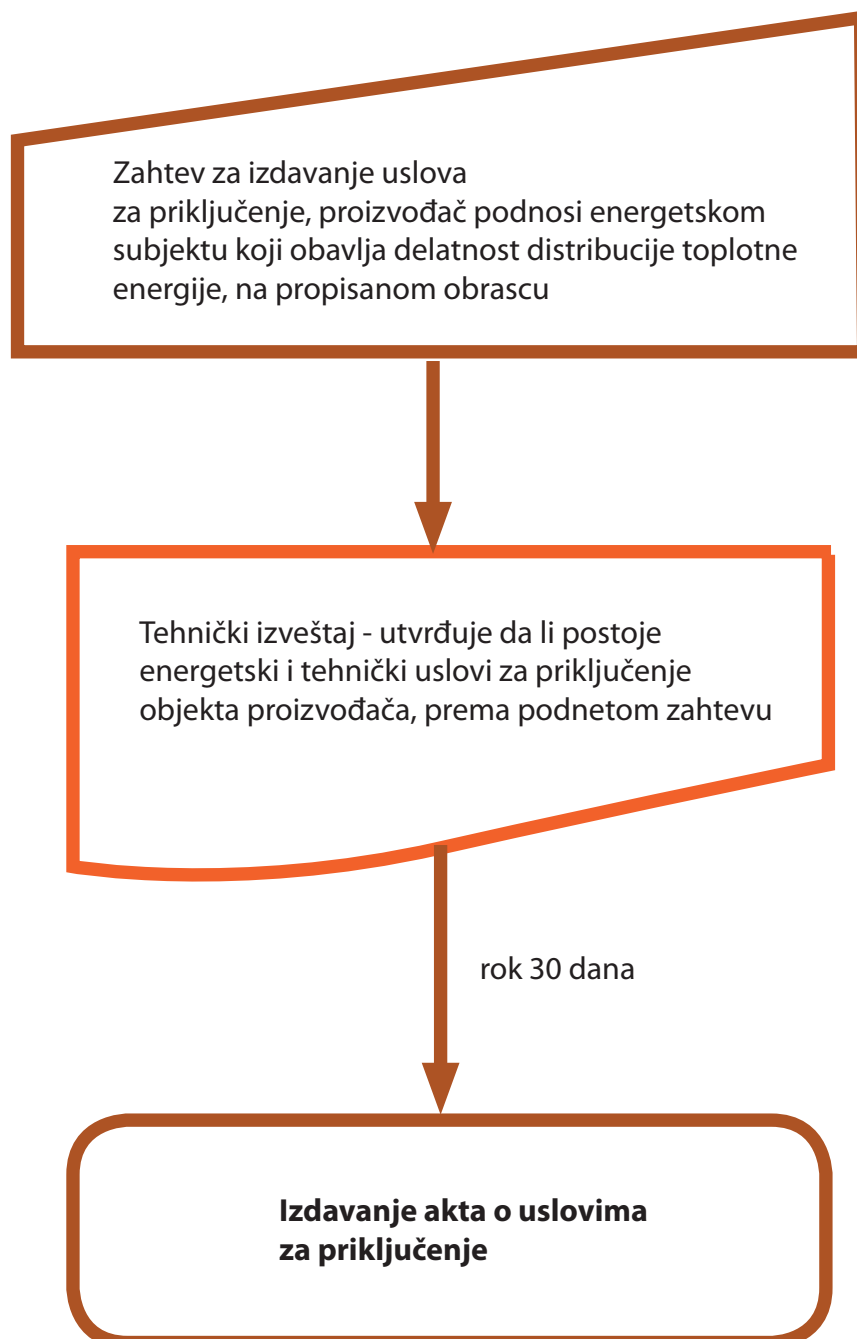


*Procedura za priključenje objekata na prenosni sistem, 23. decembar 2015. godine.

III-3 Uslovi za priključenje na distributivni sistem



III-3 Uslovi za priključenje na sistem za daljinsko grejanje



II-3 Vodna akta*

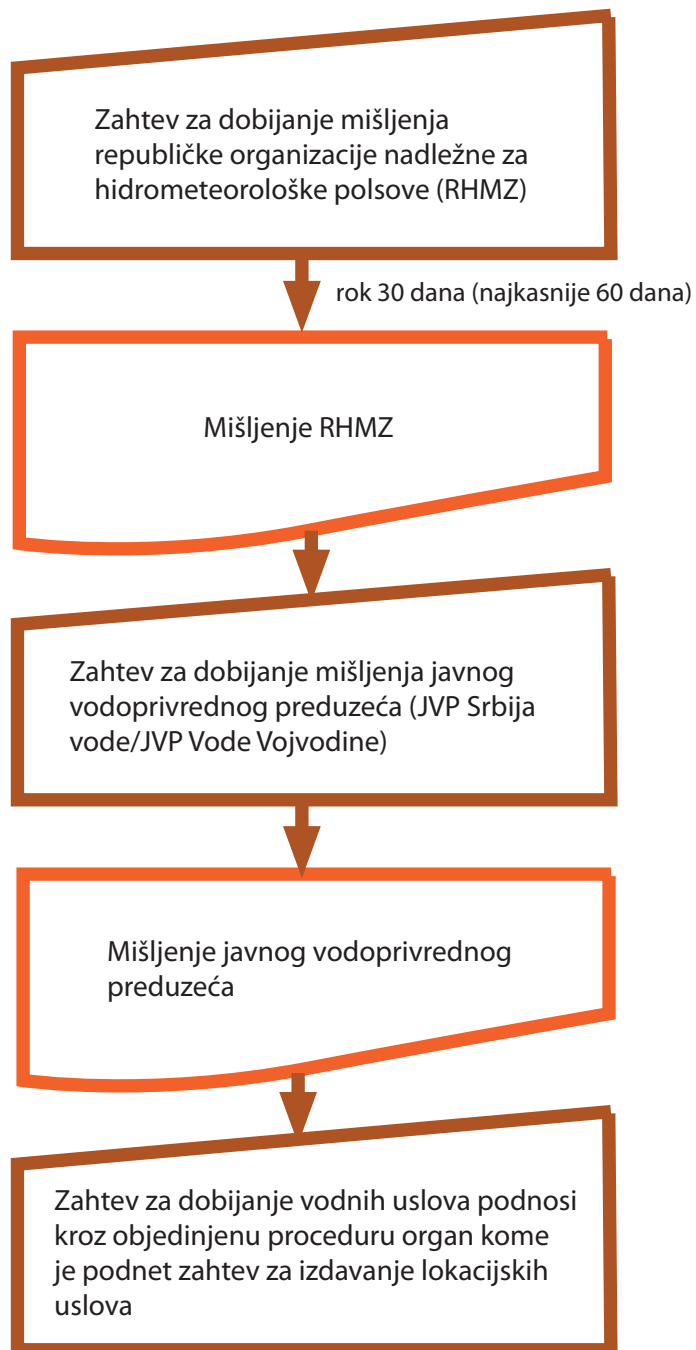
objedinjena procedura

- **Vodna akta**

- vodni uslovi (II-3)
- vodna saglasnost nije potrebna u objedinjenoj proceduri, jer usklađenost tehničke dokumentacije s vodnim uslovima za izdavanje građevinske dozvole proverava i potvrđuje vršilac tehničke kontrole (II-4)
- vodna dozvola se pribavlja ukoliko je vodnim uslovima naznačeno da je potrebna (II-5)

- **Nadležnost**

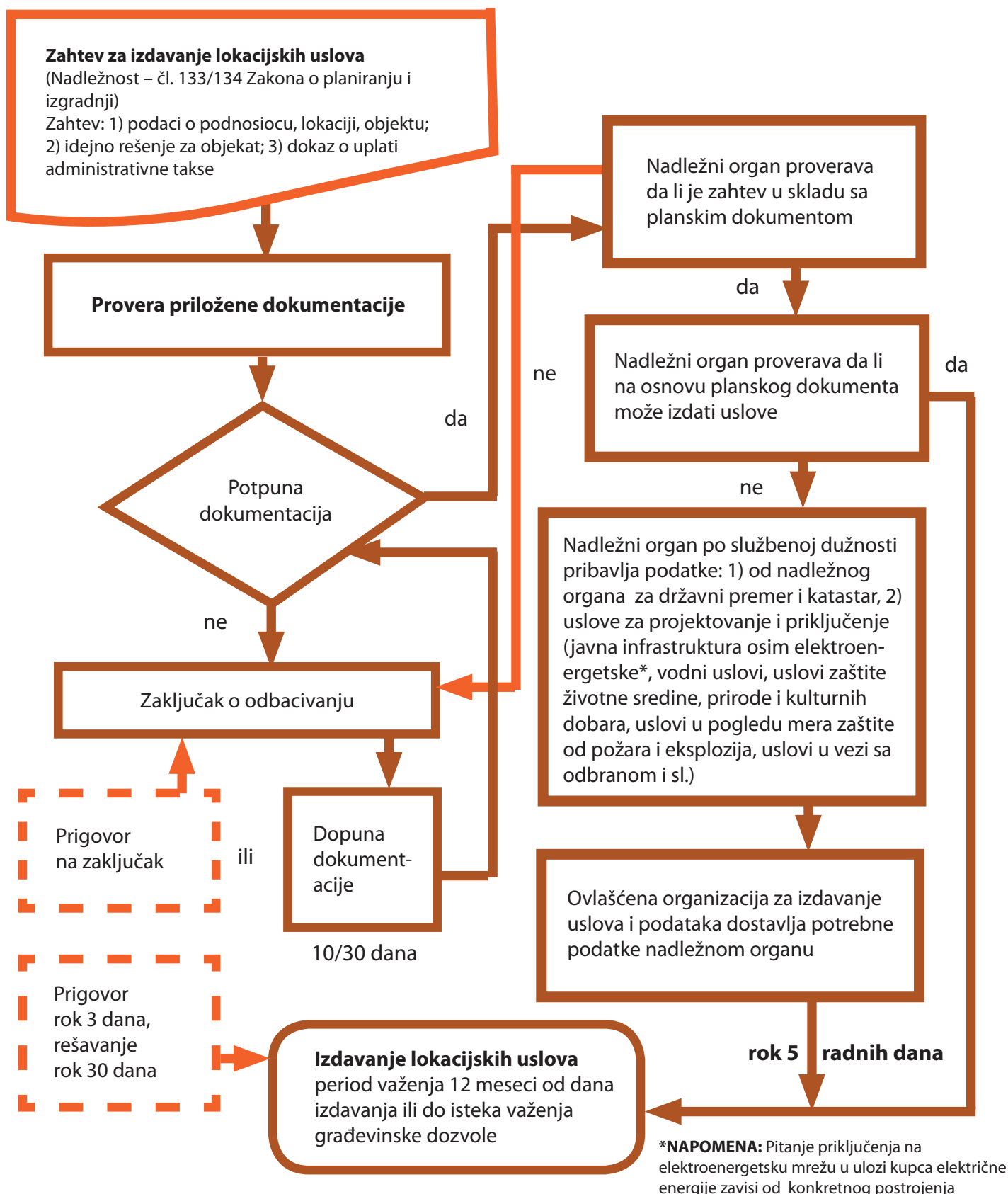
- ministarstvo nadležno za vodoprivredu
- nadležni organ autonomne pokrajine (za objekte na teritoriji autonomne pokrajine)
- nadležni organ grada Beograda (za objekte na teritoriji grada)



***NAPOMENA:** Potrebno je ukoliko nisu pribavljeni u fazi pribavljanja odobrenja za eksploataciju hidrogeotermalne energije

III-3 Pribavljanje lokacijskih uslova

objedinjena procedura



III-4 Građevinska dozvola

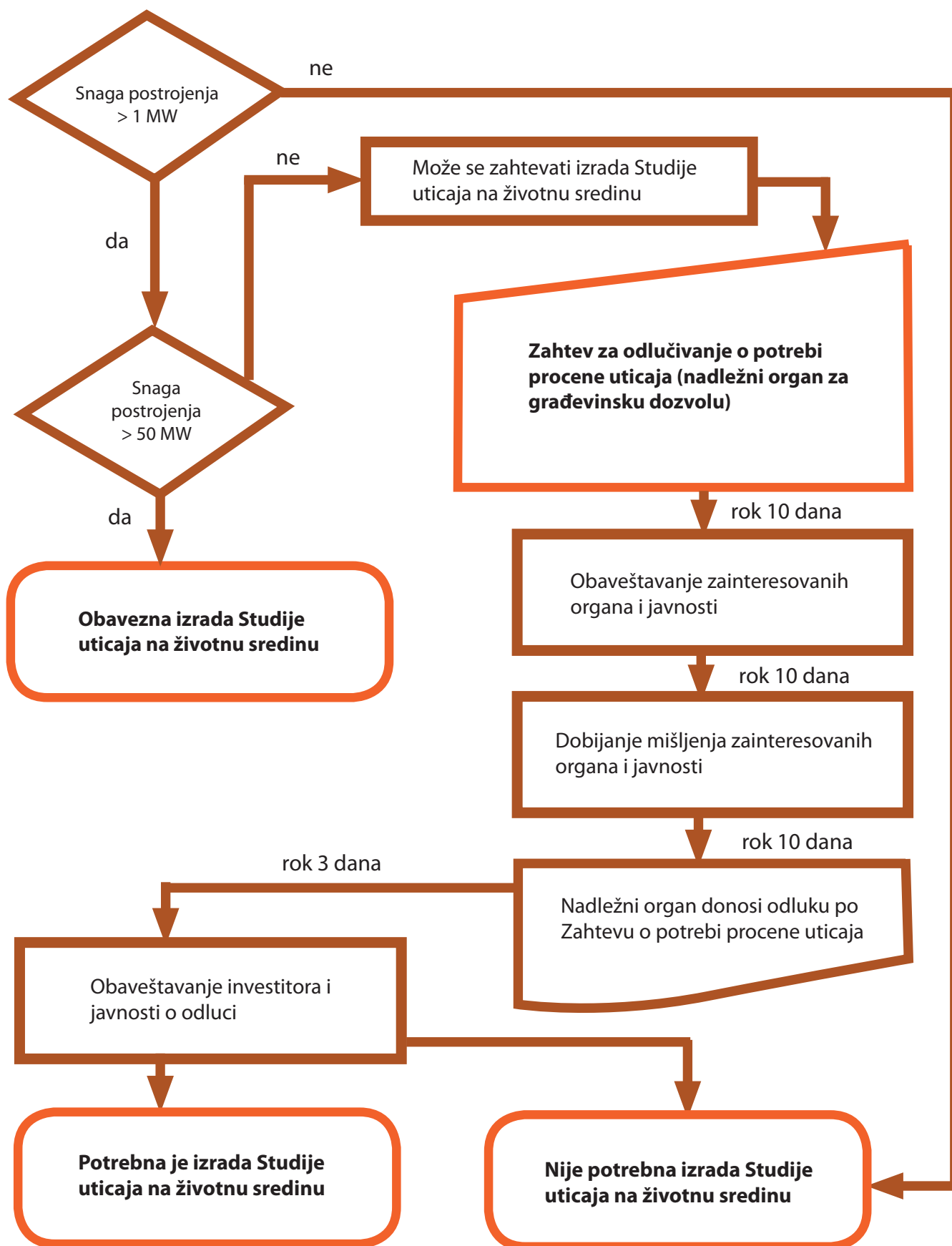
- **Po izvršenoj tehničkoj kontroli projekta za građevinsku dozvolu i pozitivnom izveštaju o izvršenoj tehničkoj kontroli, podnosi se Zahtev za izdavanje građevinske dozvole ministarstvu nadležnom za poslove građevinarstva, odnosno jedinici lokalne samouprave*.**
- **Uslov za sticanje statusa privremenog povlašćenog proizvođača električne energije.**
- **Nakon dobijanja može se podneti zahtev za pribavljanje odobrenja za priključenje na energetska mrežu.**

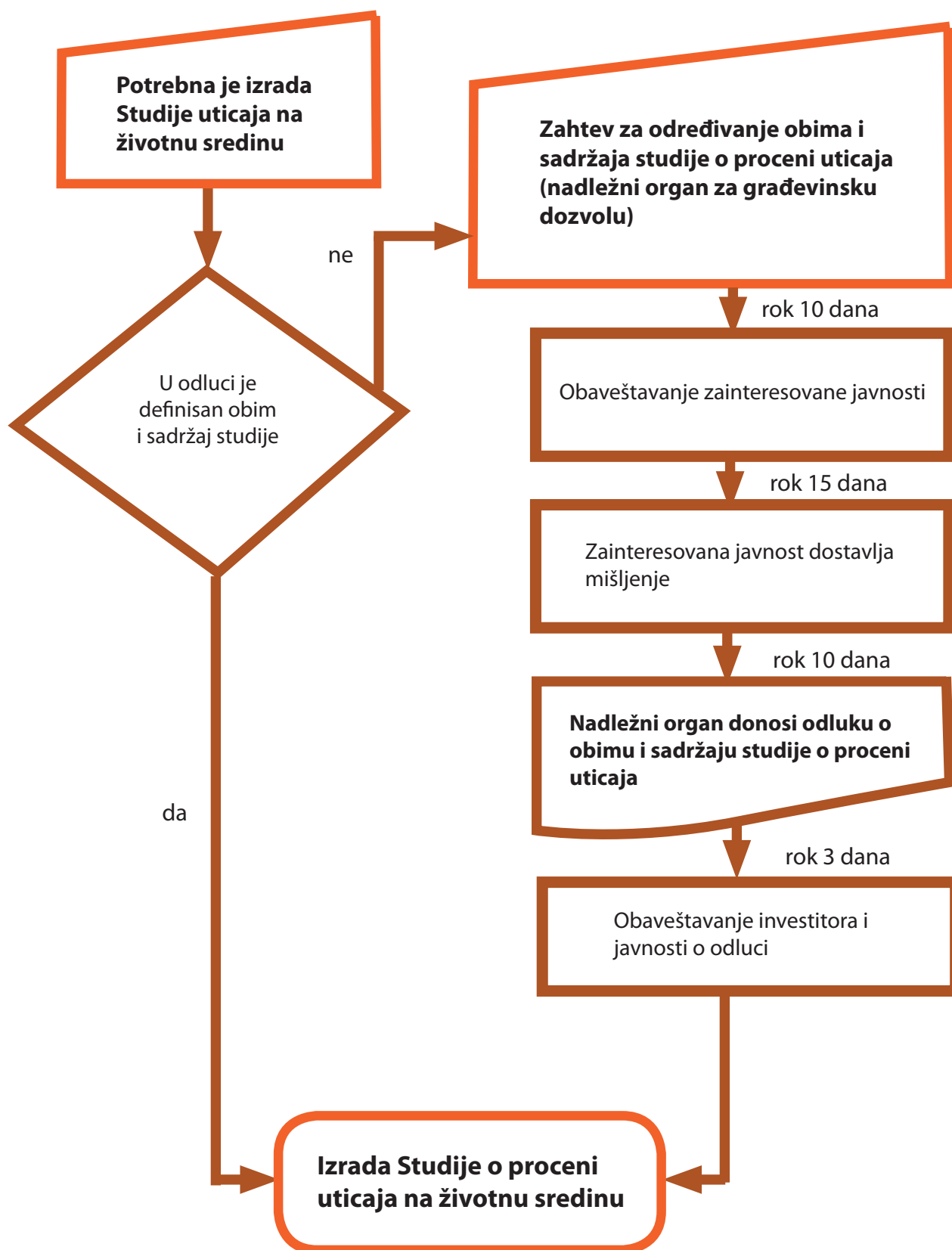
***NAPOMENA:** Više o nadležnosti na slajdu o klasifikaciji postrojenja u vezi sa Zakonom o planiranju i izgradnji

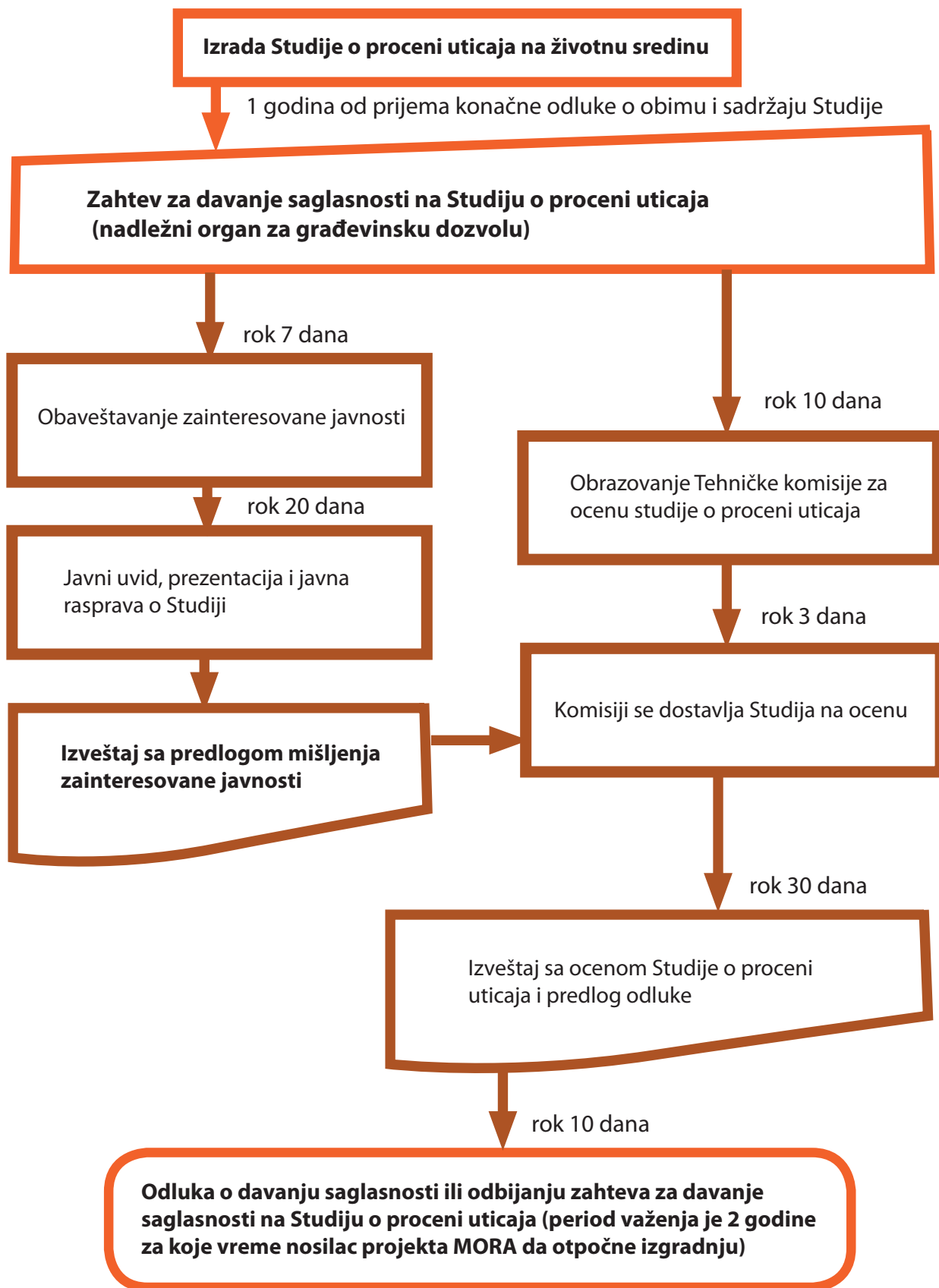
Uslov za sticanje statusa privremenog povlašćenog proizvođača električne energije

***NAPOMENA:** Od pribavljanja ove dozvole može se podneti zahtev za pribavljanje odobrenja za priključenje na energetska mreža

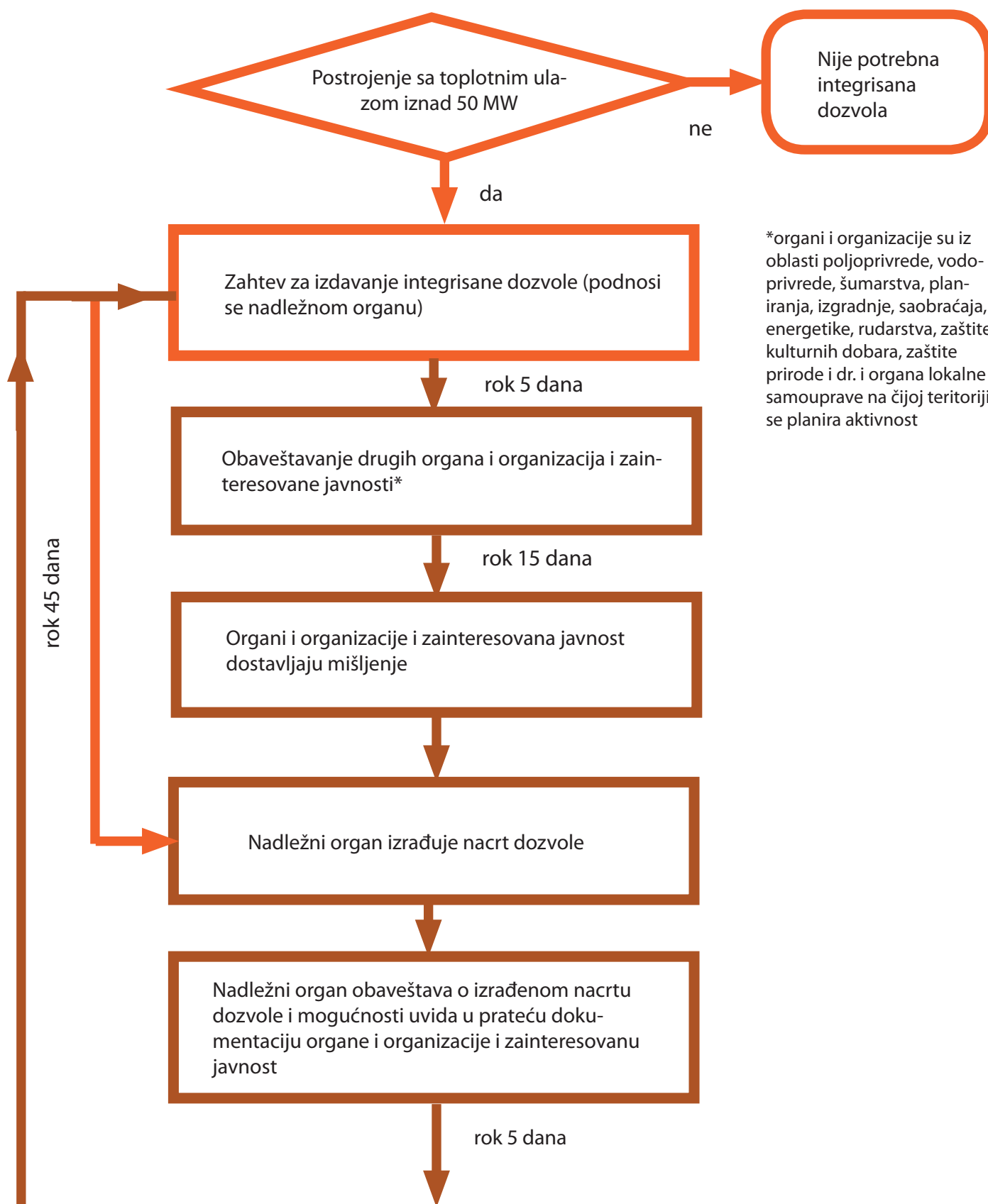
III-4 Procena uticaja na životnu sredinu

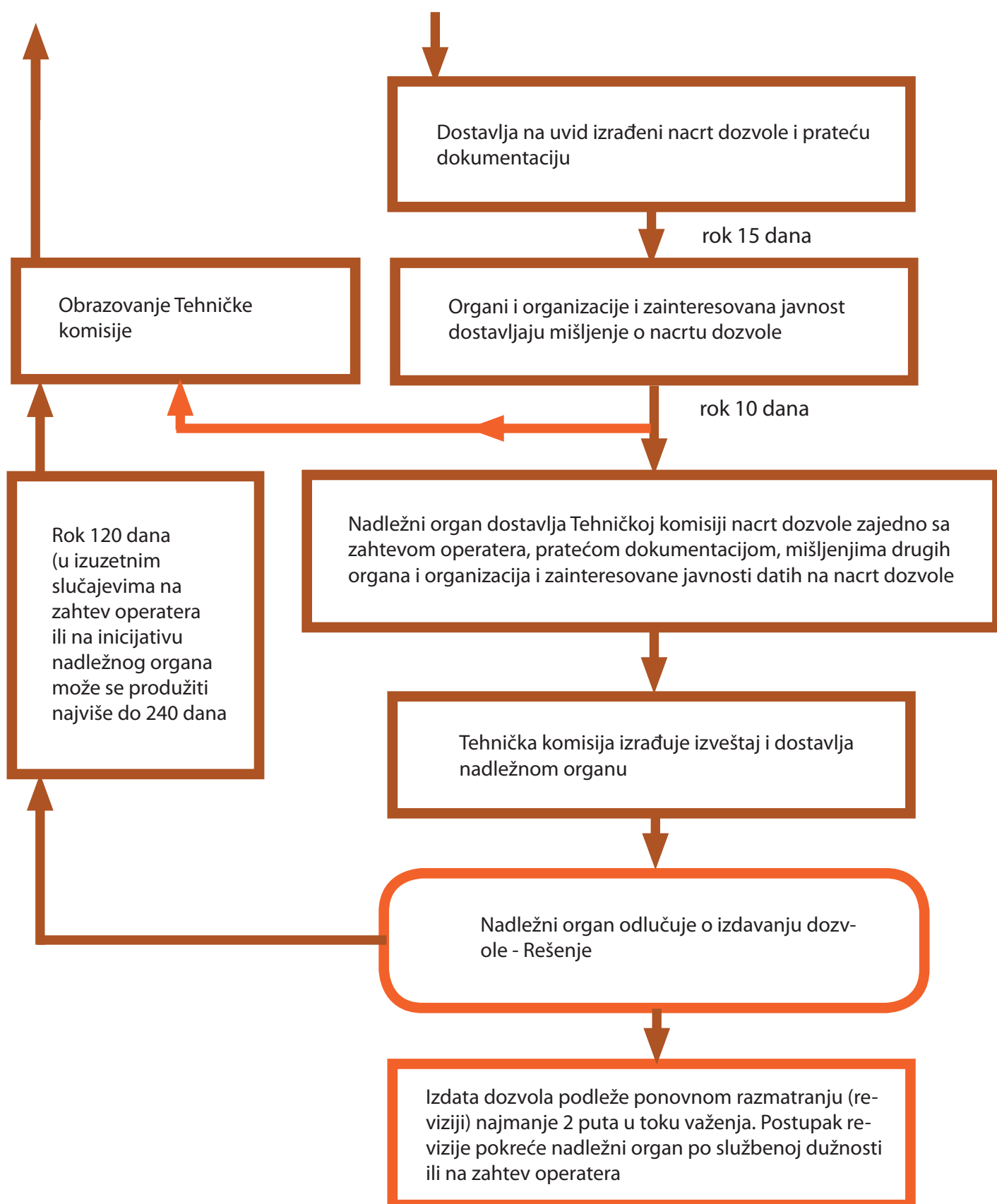




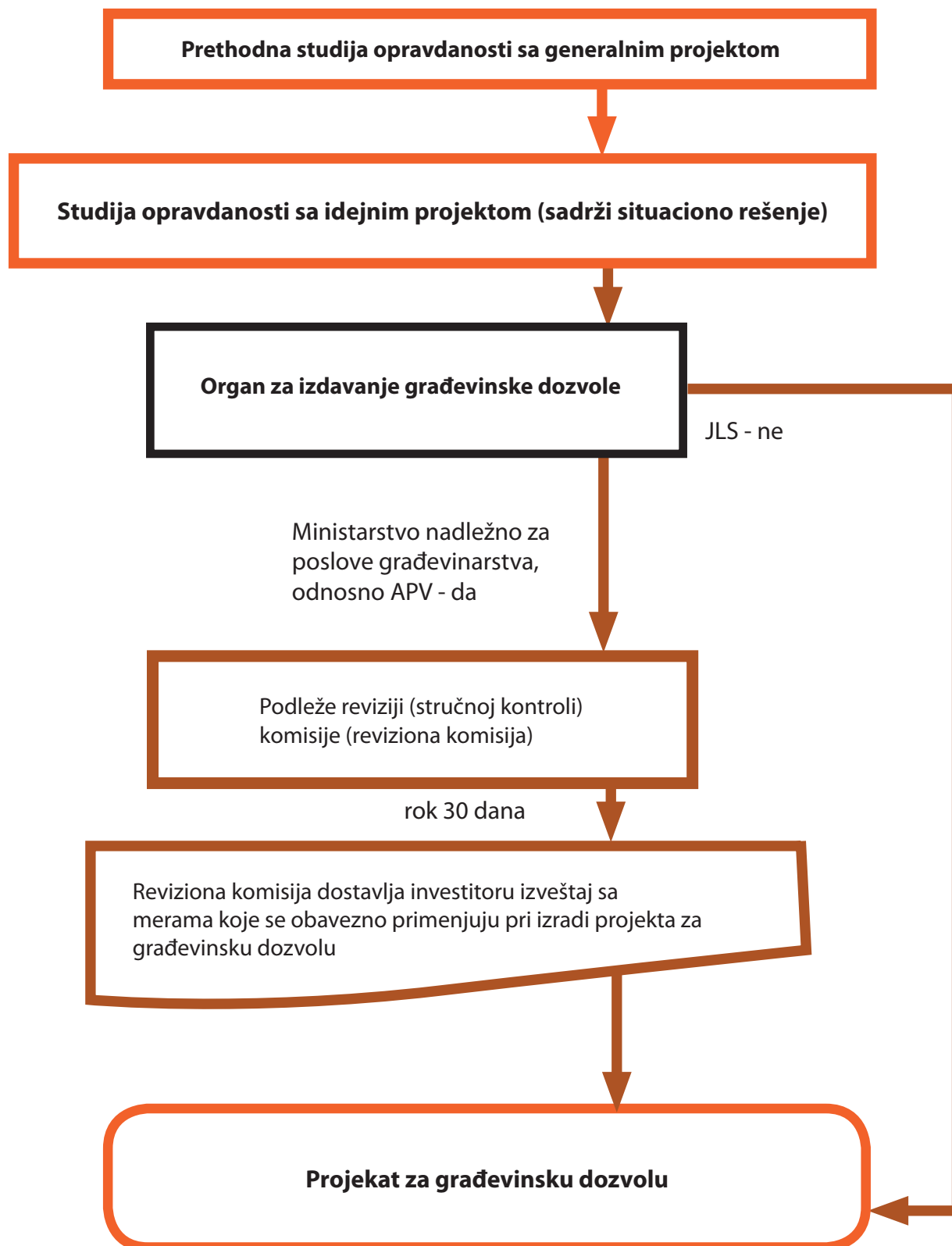


III-4 Integrisana dozvola

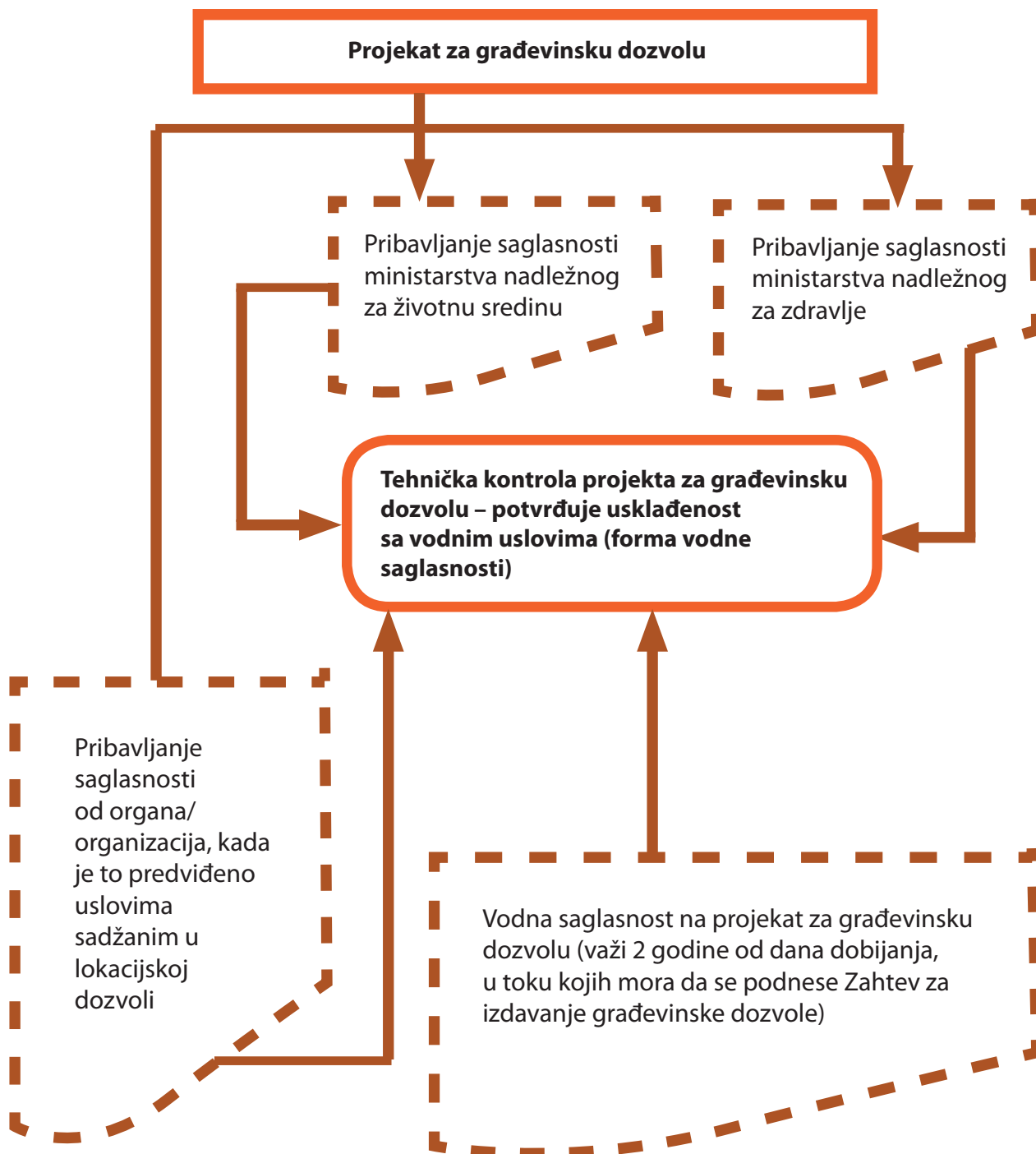




III-4 Tehnička dokumentacija za građevinsku dozvolu



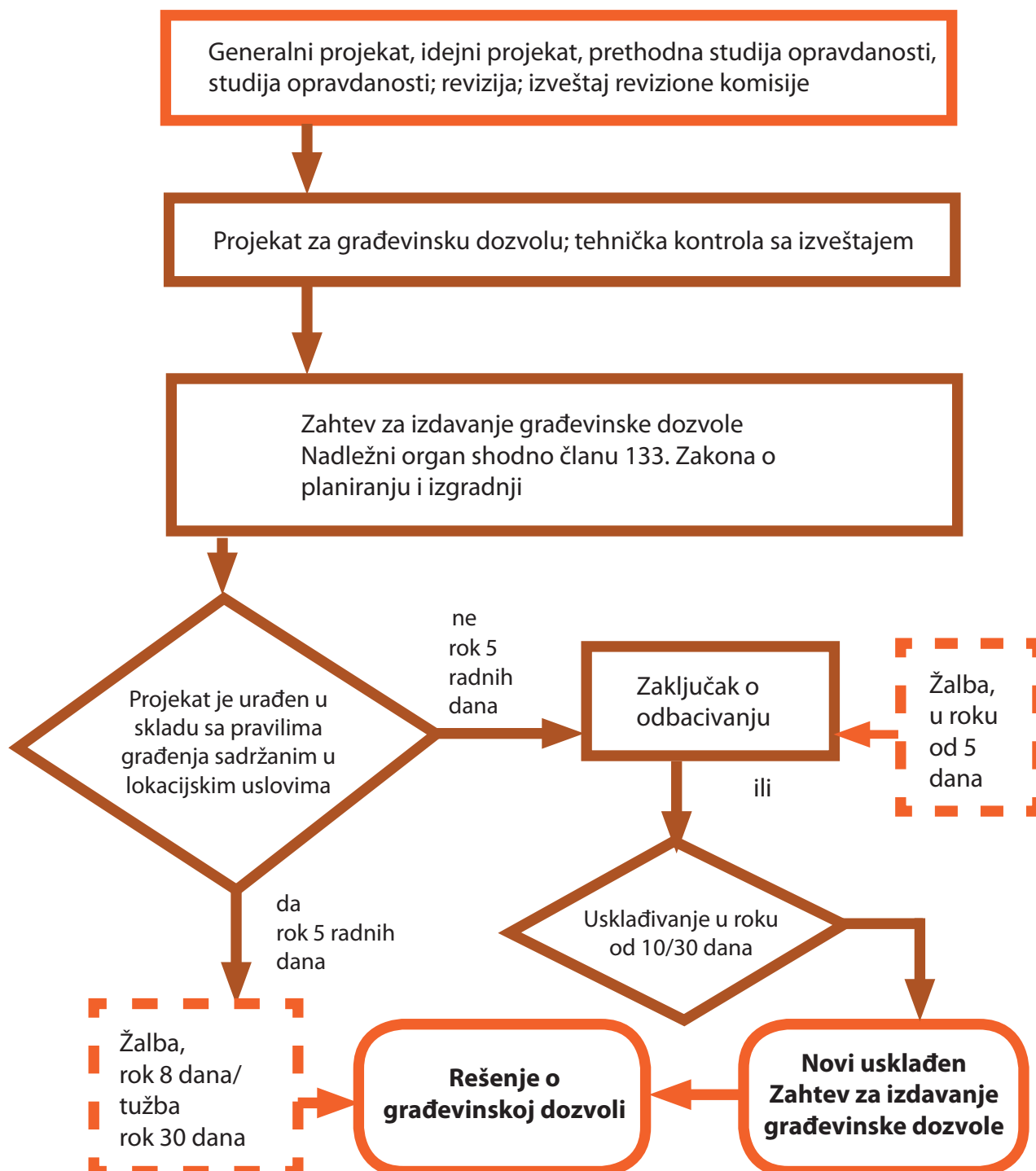
III-4 Tehnička kontrola projekta i vodna saglasnost*



***NAPOMENA:** Vodnu saglasnost investor može pribaviti i u proceduri, po Zakonu o vodama, kako bi imao potvrdu izdatu od strane organa nadležnog za vodni režim

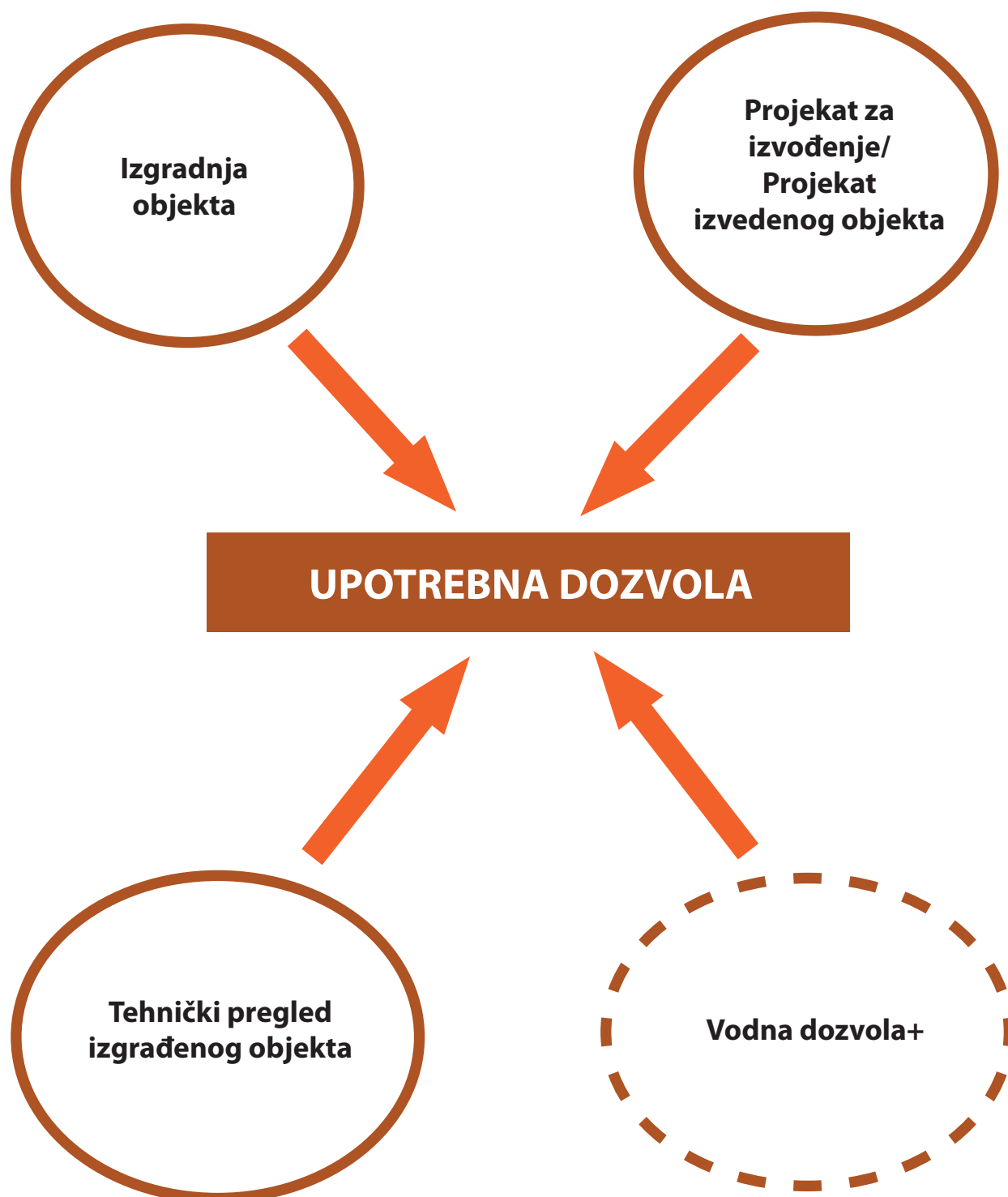
III-4 Pribavljanje građevinske dozvole

objedinjena procedura



III-5 Upotrebna dozvola

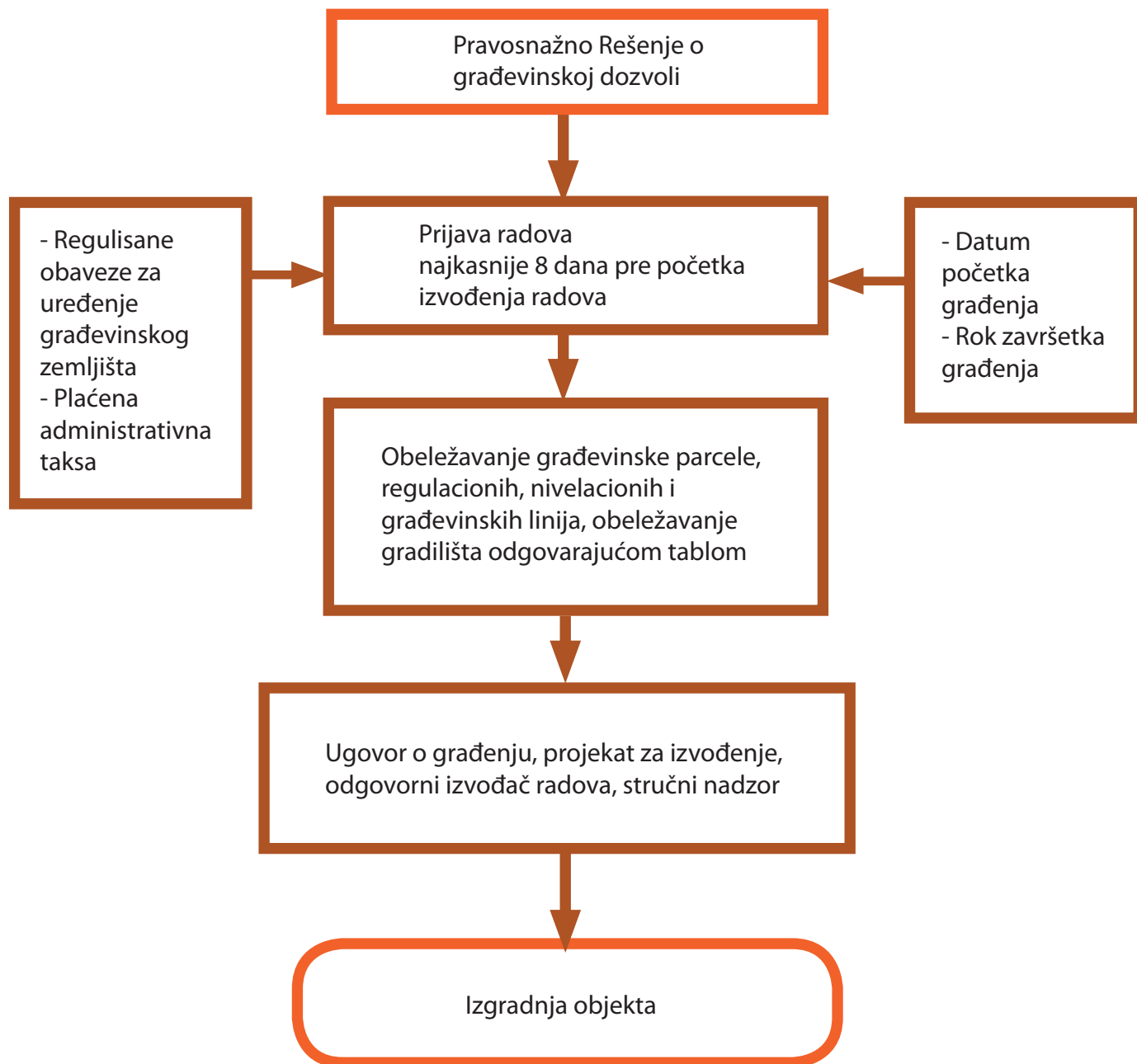
- **Podobnost objekta za upotrebu utvrđuje se tehničkim pregledom.**
- **Objekat se može koristiti po prethodno pribavljenoj upotrebnoj dozvoli.**
- **U procesu dobijanja Upotrebne dozvole potrebno je priložiti Projekat za izvođenje/Projekat izvedenog objekta.**



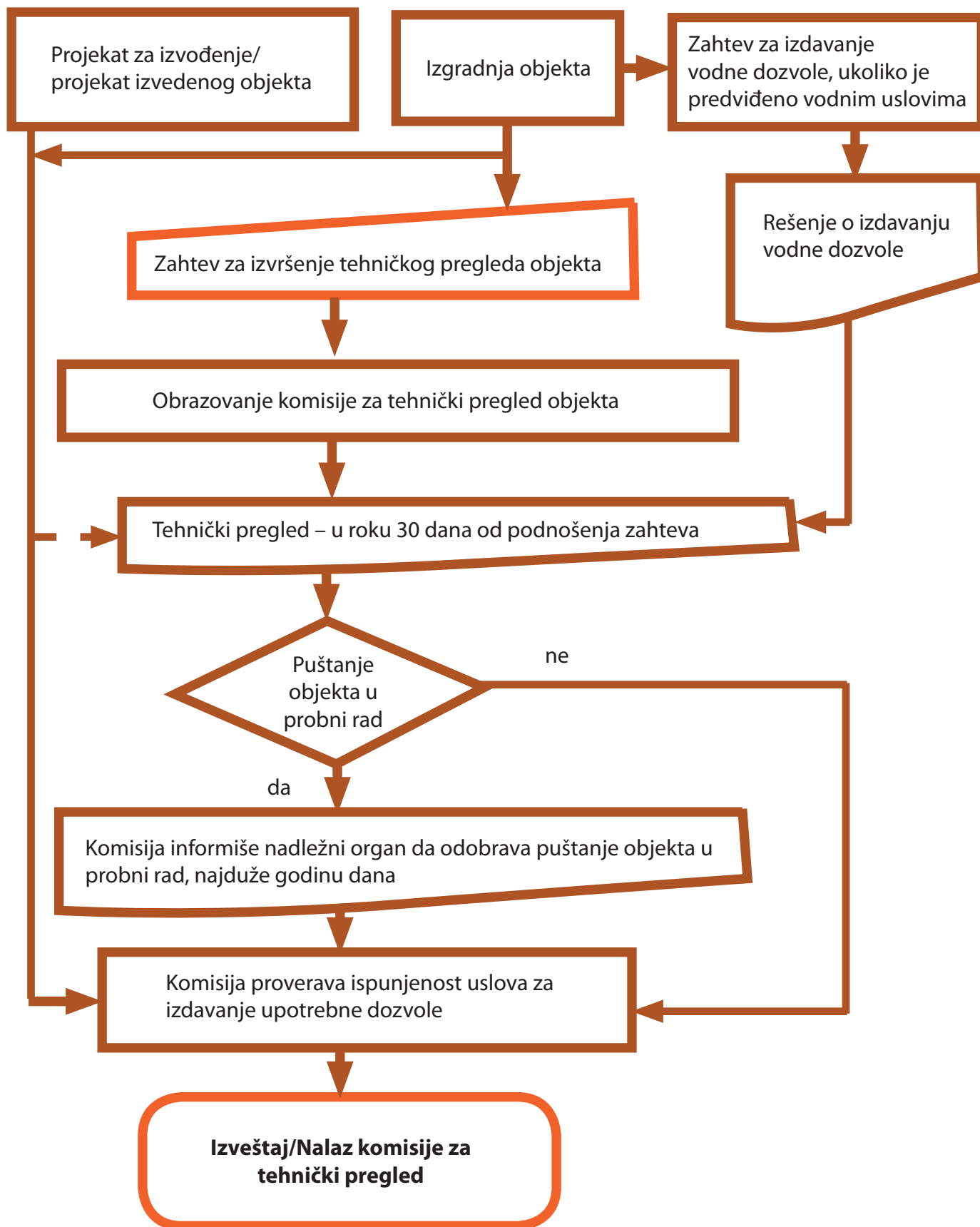
***NAPOMENA:** Poželjno je, ali nije obavezujuće, da investitor pre pribavljanja upotrebne dozvole, pribavi vodnu dozvolu, ukoliko je potrebna za konkretan objekat

III-5 Građenje objekta

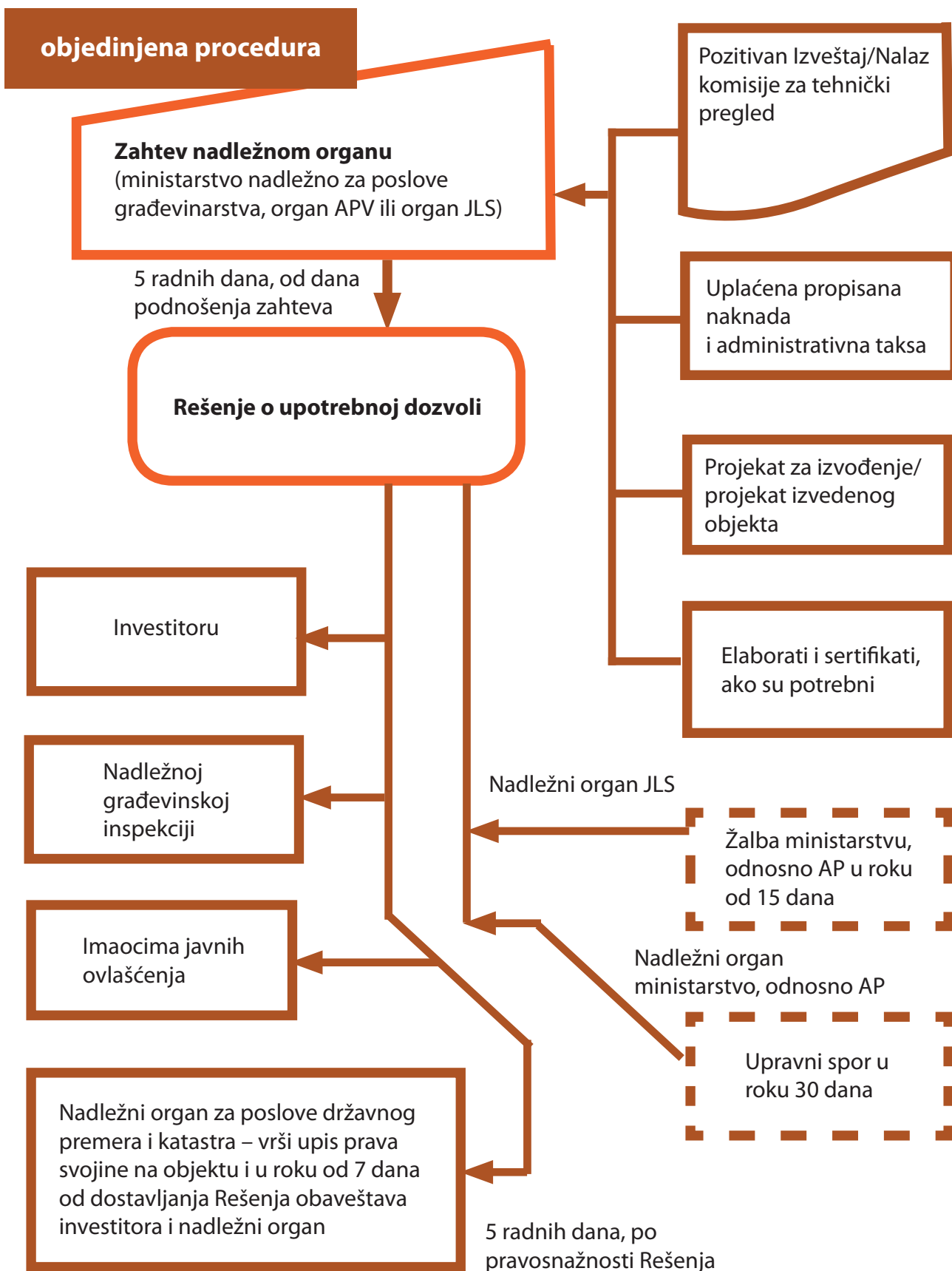
- **Građenje objekata, odnosno izvođenje radova, može da vrši privredni subjekat upisan u odgovarajući registar za građenje objekata, odnosno za izvođenje radova (izvođač radova).**
- **Obaveze izvođača radova su da: pre početka radova potpiše Projekat za izvođenje, rešenjem odredi odgovornog izvođača radova, odgovornom izvođaču radova obezbedi ugovor o građenju i dokumentaciju na osnovu koje se gradi objekat, obezbedi preventivne mere za bezbedan i zdrav rad u skladu sa zakonom, da izvodi radove prema dokumentaciji na osnovu koje je izdata građevinska dozvola, organizuje gradilište na način kojim će obezbediti pristup lokaciji, obezbeđuje sigurnost objekta i lica na gradilištu i okoline, obezbeđuje dokaz o kvalitetu izvršenih radova, vodi građevinski dnevnik, građevinsku knjigu i obezbeđuje knjigu inspekcije, obezbeđuje objekte i okolinu u slučaju prekida radova.**
- **Na gradilištu je potrebno da se stalno nalazi ugovor o građenju, rešenje o određivanju odgovornog izvođača radova na gradilištu i Projekat za građevinsku dozvolu/projekat za izvođenje.**
- **Investitor obezbeđuje stručni nadzor u toku građenja objekta, odnosno izvođenja radova za koje je izdata građevinska dozvola.**



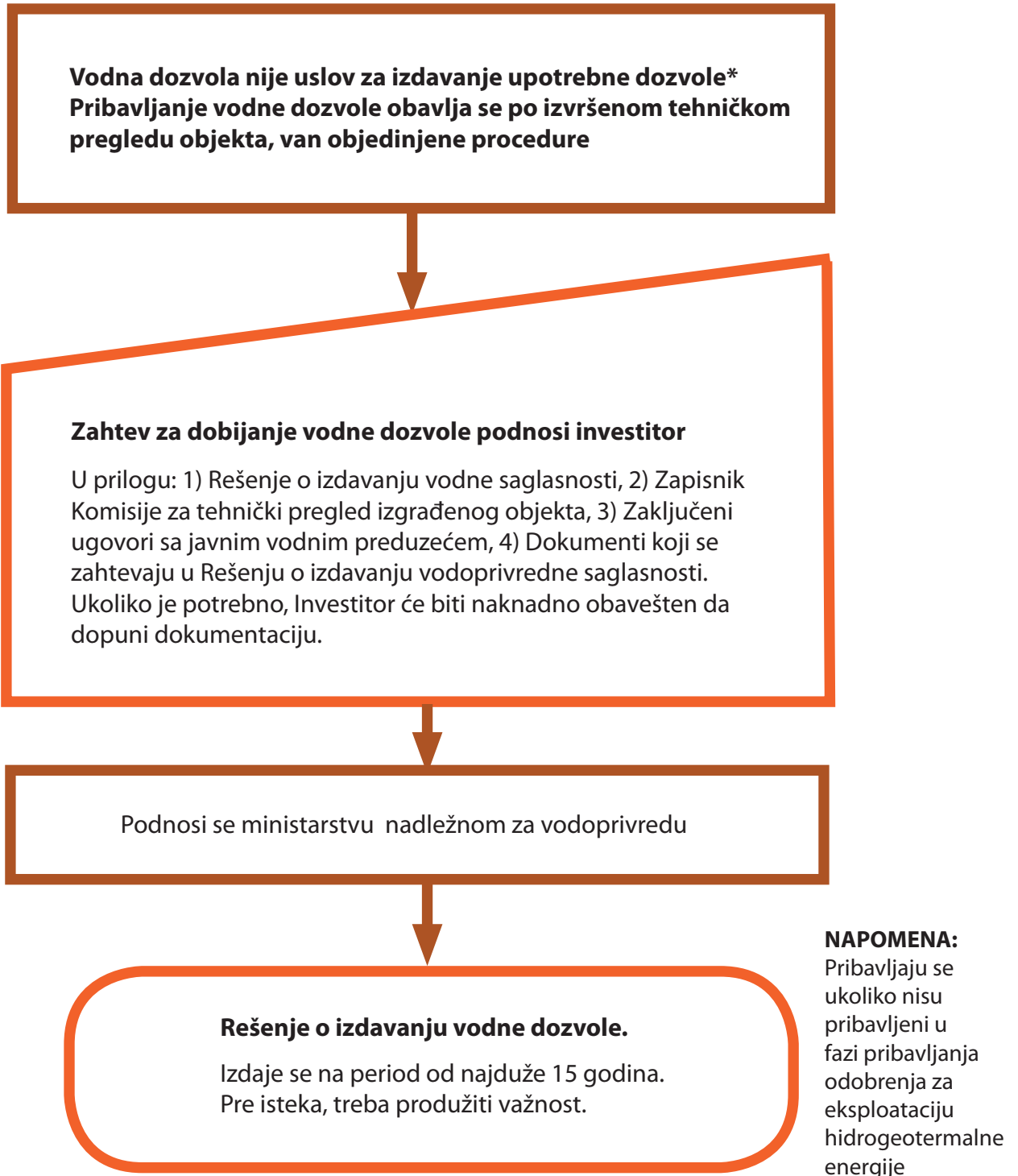
III-5 Tehnički pregled



III-5 Upotrebna dozvola



III-5 Pribavljanje vodne dozvole - ukoliko je predviđeno vodnim uslovima -



***NAPOMENA:** U cilju pravne sigurnosti korišćenja objekta, preporuka je da se vodna dozvola pribavi pre početka korišćenja objekta

IV Odobrenje za priključenje postrojenja na energetska mrežu

Uslov za sticanje statusa povlašćenog proizvođača električne energije



NAPOMENA:

1. Investitor procenjuje kada će tražiti ovo odobrenje. Može ga tražiti od momenta pribavljanja građevinske dozvole
2. Distributer toplotne energije donosi pravila o radu distributivnog sistema uz saglasnost JLS

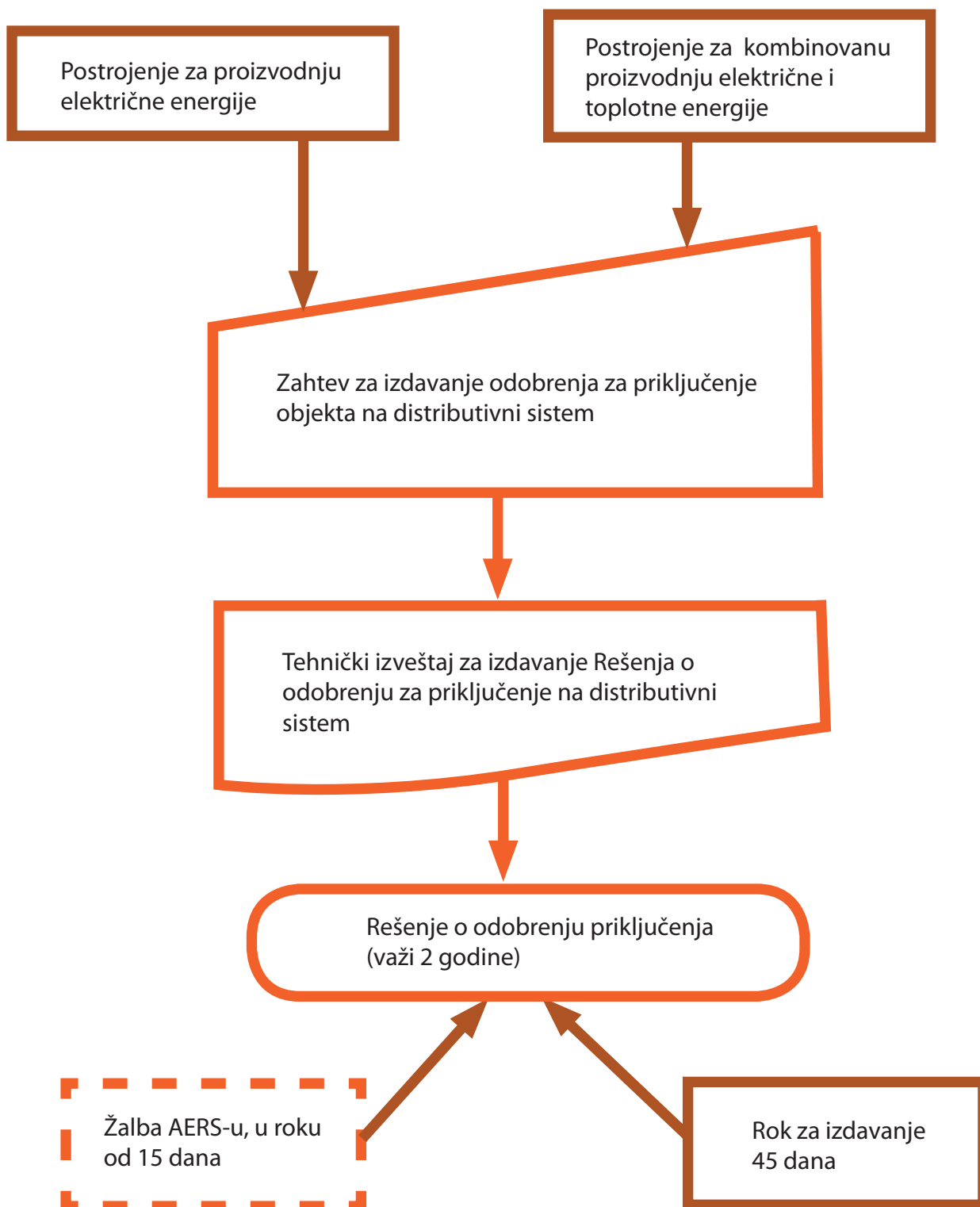
IV-1a Odobrenje za priključenje postrojenja na prenosni sistem



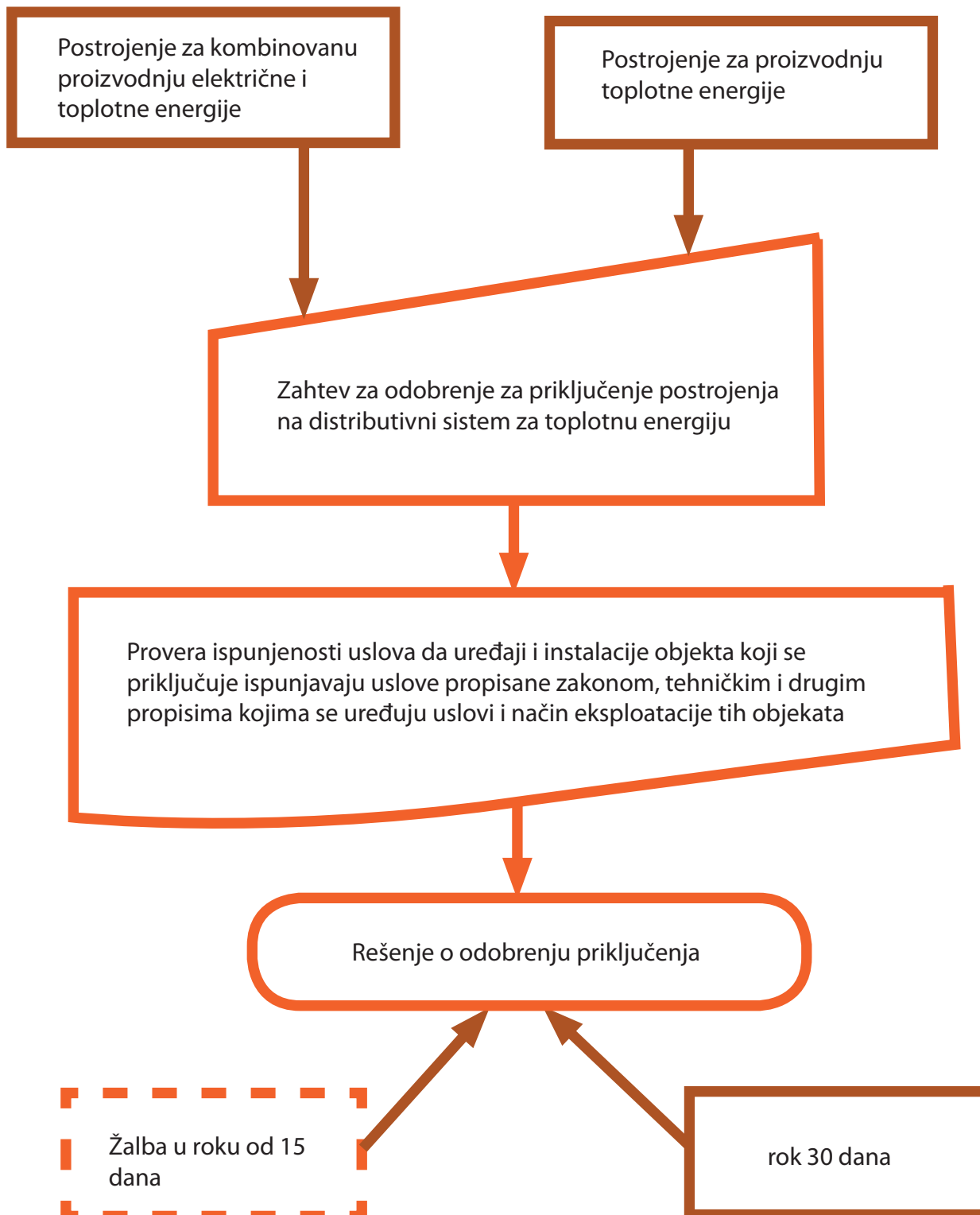
Aktivnosti u postupku priključenja postrojenja na prenosni sistem obuhvataju: izradu studije priključenja objekta, izradu planske i tehničke dokumentacije i pribavljanje potrebnih dozvola za izgradnju priključka, gradnju i praćenje gradnje priključka, proveru ispunjenosti tehničkih uslova za priključenje na prenosni sistem i druge aktivnosti u skladu sa Zakonom.*

*Procedura za priključenje objekata na prenosni sistem, 23. decembar 2015. godine.

IV-1b Odobrenje za priključenje postrojenja na distributivni sistem



IV-2 Odobrenje za priključenje postrojenja na mrežu za distribuciju toplotne energije

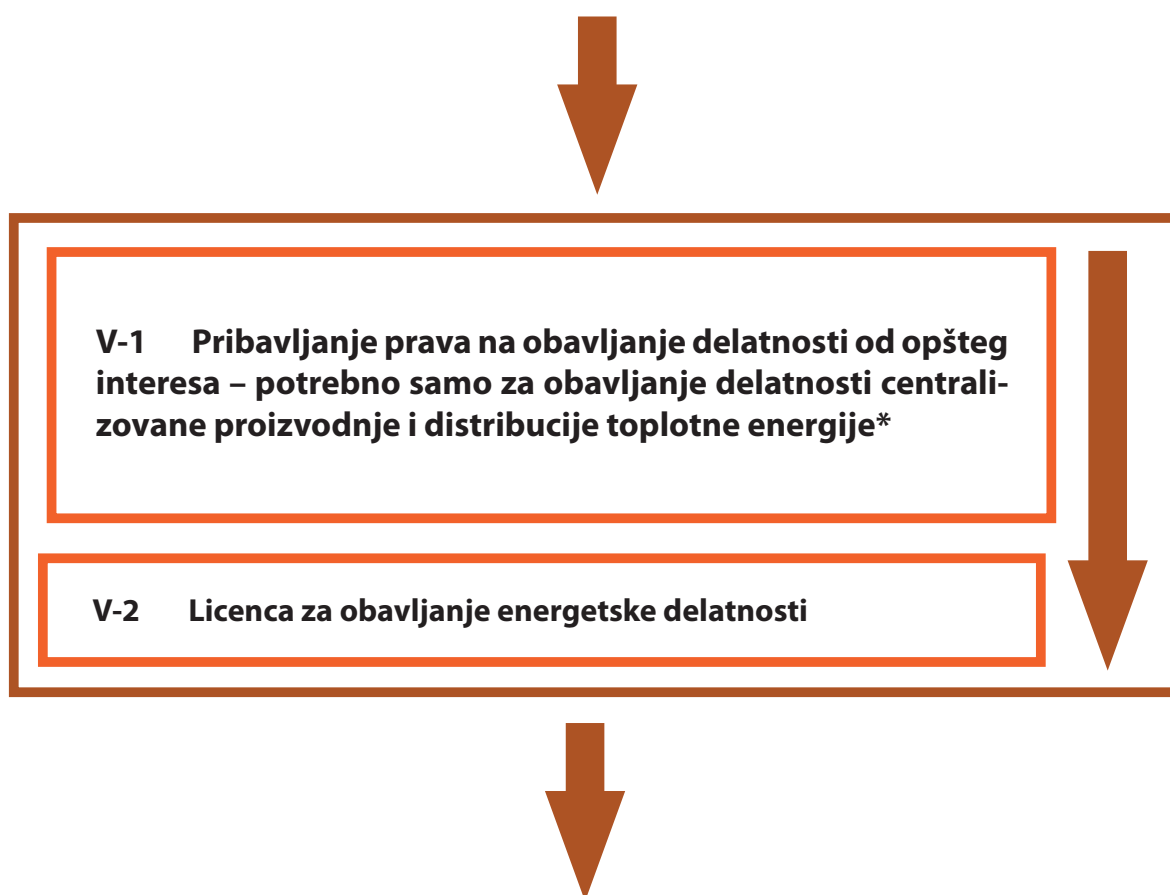


V Sticanje prava na obavljanje delatnosti proizvodnje električne/ toplotne energije

- **Tržišna delatnost**
 - Proizvodnja električne energije
 - Kombinovana proizvodnja električne i toplotne energije

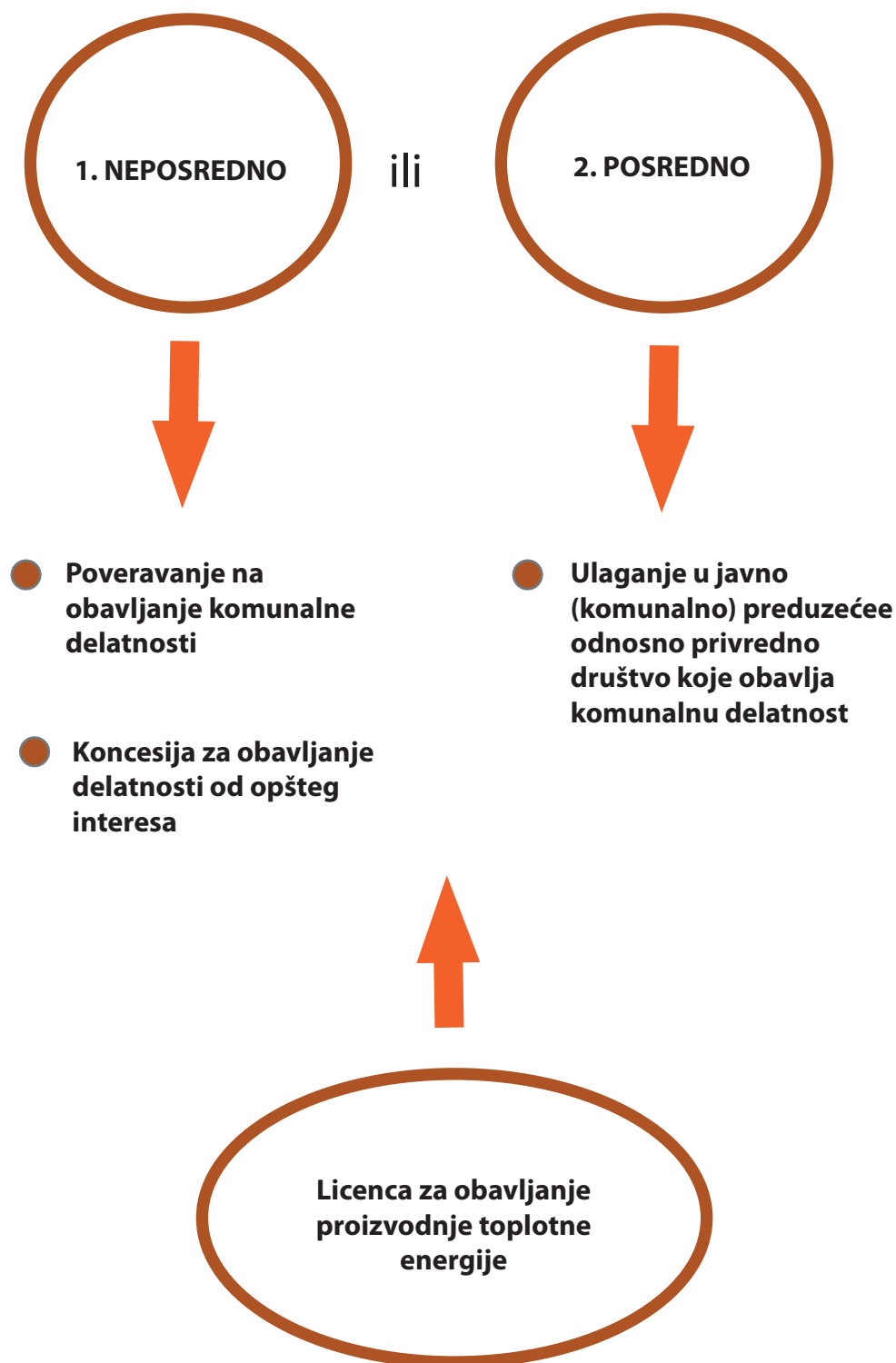
- **Delatnost od opšteg interesa**
 - Proizvodnja i distribucija toplotne energije
 - centralizovana proizvodnja i distribucija u više objekata vodene pare, tople ili vrele vode za potrebe grejanja

V Sticanje prava na obavljanje delatnosti proizvodnje električne energije i kombinovane proizvodnje električne/ toplotne energije



***NAPOMENA:** Može se steži na osnovu Zakona o komunalnim delatnostima i na osnovu Zakona o javno-privatnom partnerstvu

V-1 Pravo na obavljanje proizvodnje toplotne energije - način sticanja -

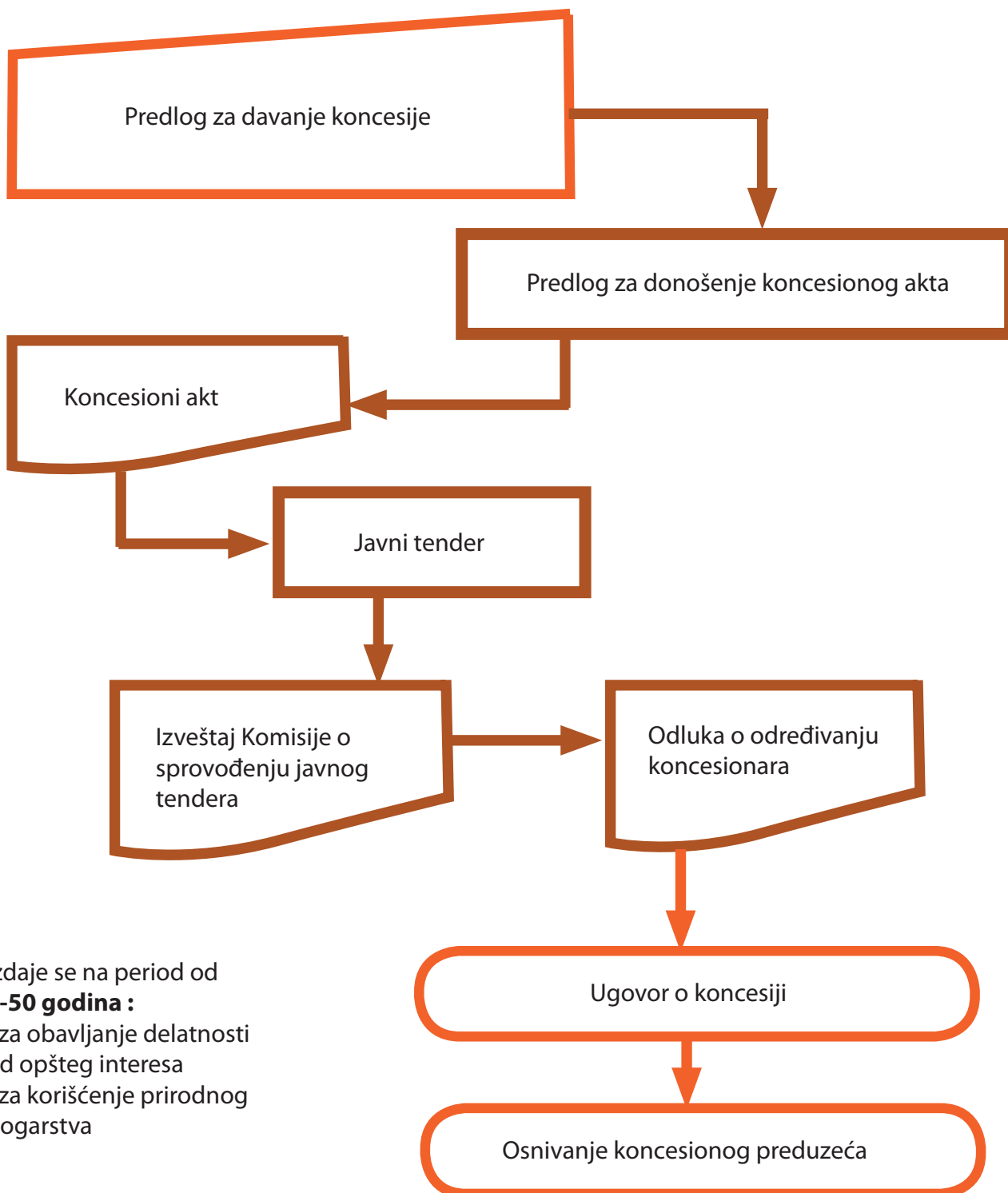


V-1 Poveravanje obavljanja komunalne delatnosti*

- **Poveravanje se vrši na osnovu:**
 - odluke skupštine jedinice lokalne samouprave o načinu obavljanja komunalne delatnosti
 - ugovora o poveravanju
- **Finansiranje obavljanja komunalne delatnosti određuje postupak poveravanja njenog obavljanja:**
 - vršilac dobija pravo da finansiranje obavljanja komunalne delatnosti obezbeđuje u celosti ili delimično naplatom naknade od korisnika usluga, na koji postupak se primenjuju odredbe zakona kojim se uređuju koncesije
 - obavljanje komunalne delatnosti finansira se iz budžeta jedinice lokalne samouprave, na koji postupak se primenjuju odredbe zakona kojim se uređuju javne nabavke

***NAPOMENA:** Zakon o komunalnim delatnostima

V-1 Koncesija*



Izdaje se na period od

5-50 godina :

- za obavljanje delatnosti od opšteg interesa
- za korišćenje prirodnog bogarstva

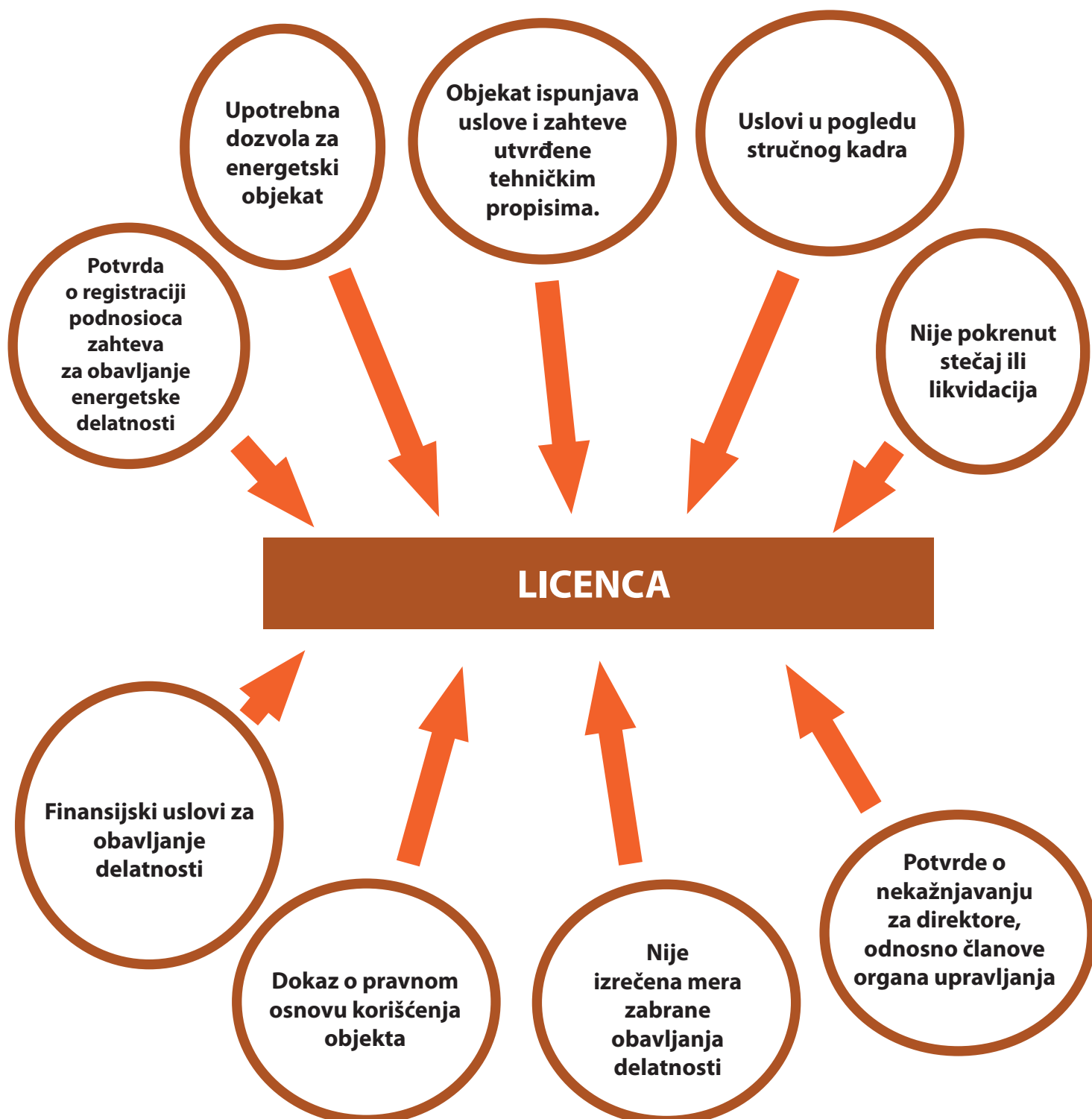
***NAPOMENA:** Zakon o javno-pri-vatnom partnerstvu

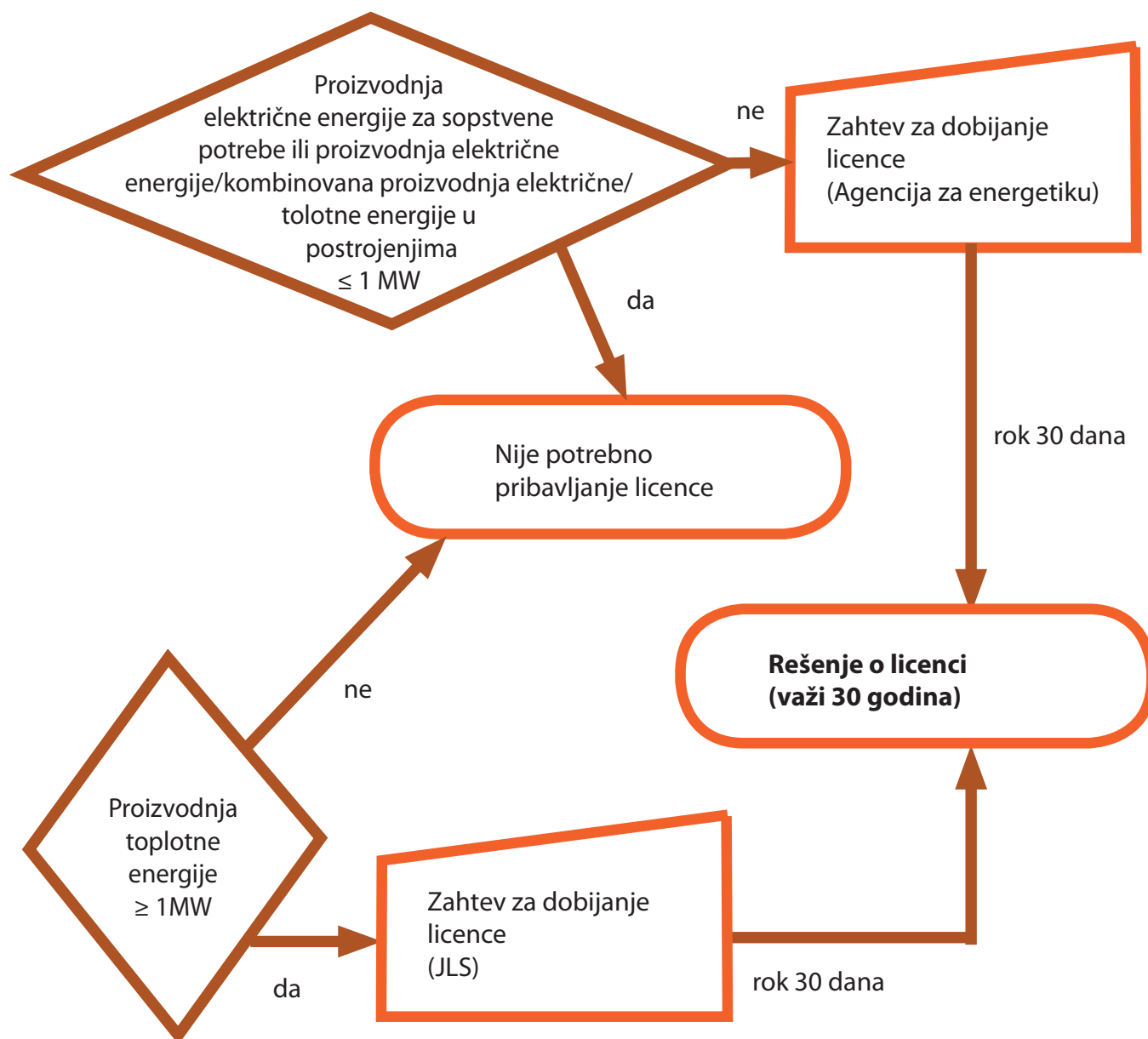
V-1 Koncesija – sadržaj ugovora o koncesiji

- Ugovorne strane, predmet koncesije, uključujući opis objekata, uređaja, postrojenja
- Rok trajanja koncesije i uslovima pod kojim se taj rok može produžiti, dužini trajanja pripremnih radnji
- Raspodela rizika između privatnog i javnog partnera i obim isključivih prava privatnog partnera
- Visina i način obezbeđenja garancija za izvršavanje koncesione obaveze.
- Uslovi obavljanja koncesione delatnosti i standardi proizvoda i usluga, transferu tehnologije
- Koncesiona naknada (visina, rokovi, uslovi i način plaćanja)
- Prava i obaveze u pogledu preduzimanja mera obezbeđivanja opšte sigurnosti, zaštite zdravlja i zaštite životne sredine kao i odgovornosti za naknadu štete prouzrokovane ugrožavanjem opšte sigurnosti i zaštite životne sredine
- Prava na prenos koncesije
- Vreme i način predaje nepokretnosti, objekta, uređaja ili postrojenja i stanju u kome se oni moraju predati
- Uslovi izmena ili raskida ugovora i njihovim posledicama, promenjenim okolnostima i višoj sili
- Način rešavanja sporova i primena merodavnog prava
- Način međusobnog obaveštavanja o izvršenju ugovora, način vršenja kontrole izvršenja ugovora i ostvarivanja prava i obaveza ugovornih strana
- Druge odredbe o kojima se sporazumno dogovore ugovorne strane

V-2 Licenca - za obavljanje energetske delatnosti -

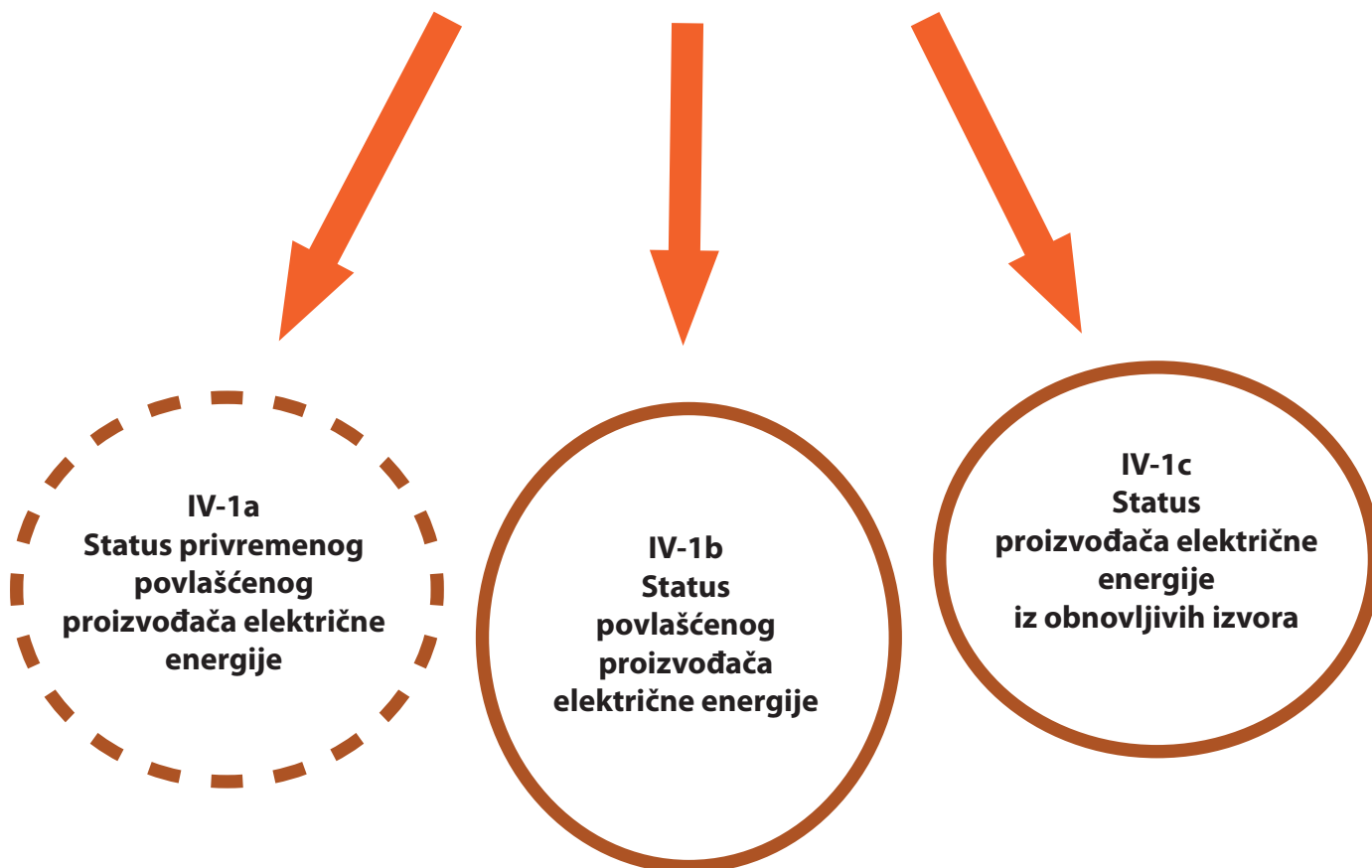
Uslov za sticanje statusa povlašćenog proizvođača električne energije





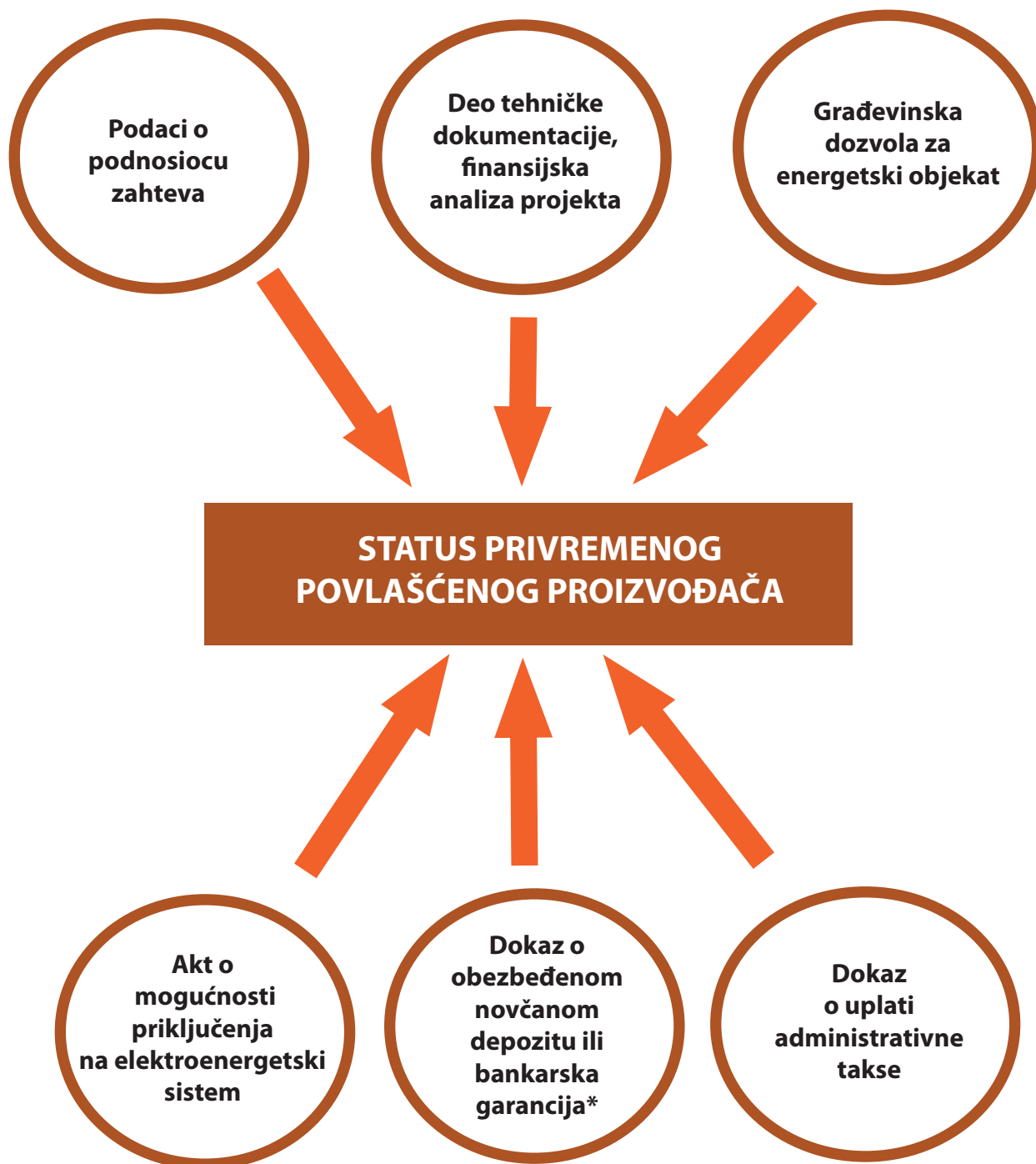
VI Sticanje statusa ((privremenog) povlašćenog) proizvođača energije iz obnovljivih izvora energije

VI-1 Status proizvođača električne energije iz obnovljivih izvora energije



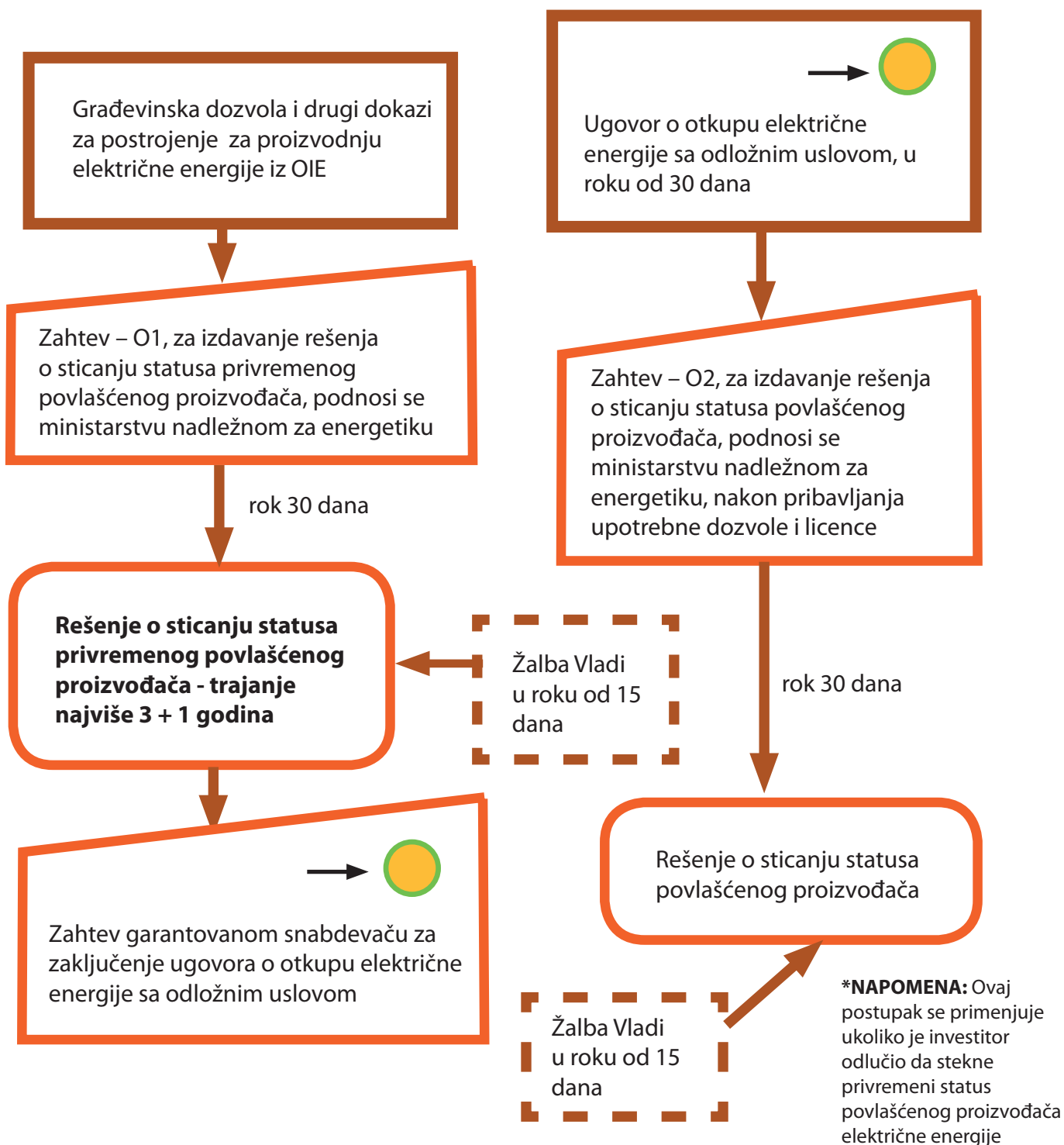
- **Energetski subjekt i fizičko lice - samo za instalisane snage do 30 kW.**
- **Ne može se istovremeno biti nosilac dva ili više statusa.**
- **Navedeni koraci nisu obavezni, ali omogućavaju ostvarenje odgovarajućih prava.**

VI-1a Status privremenog povlašćenog proizvođača električne energije

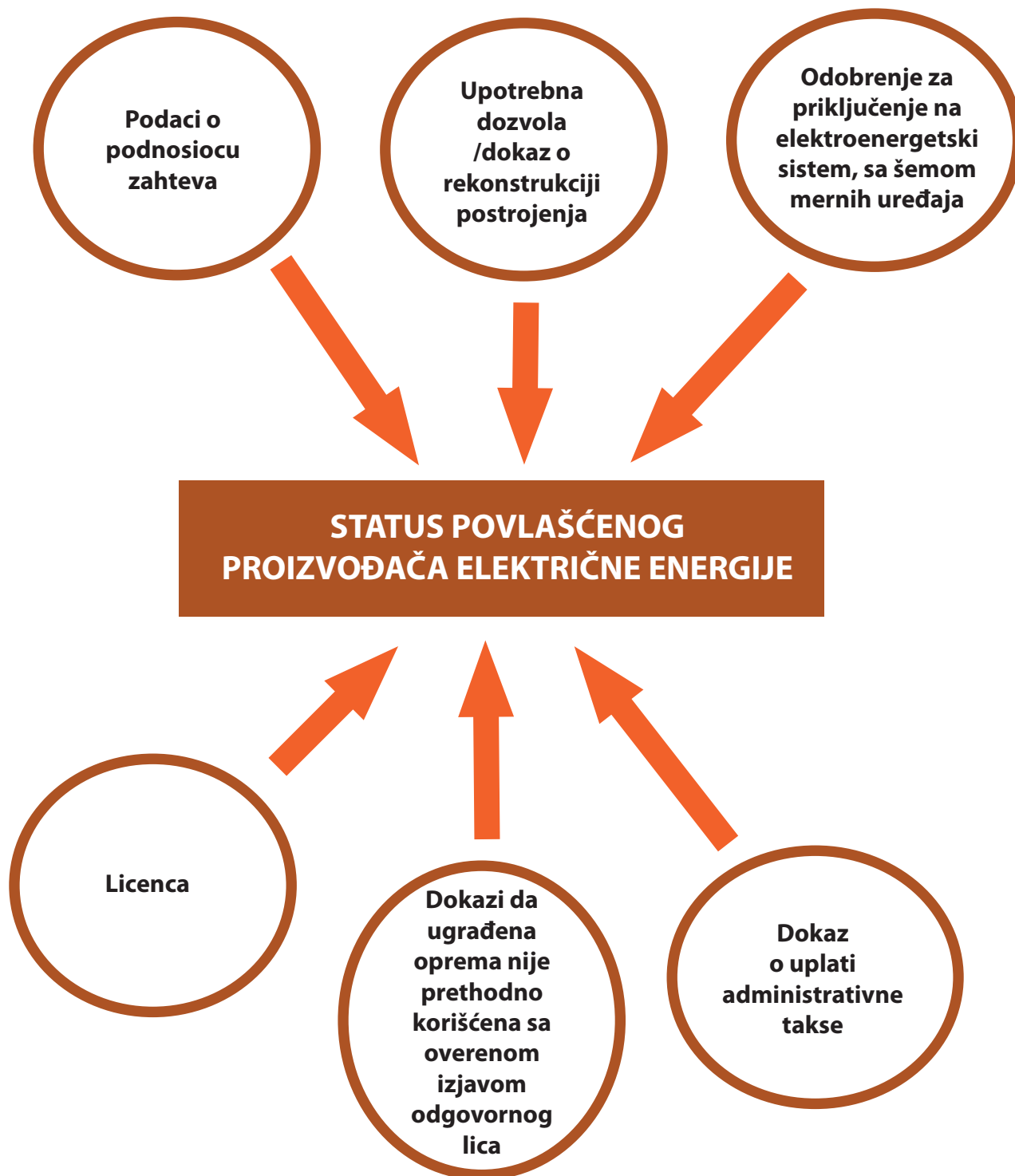


*NAPOMENA: za elektranu instalisane snage veće od 100 kW

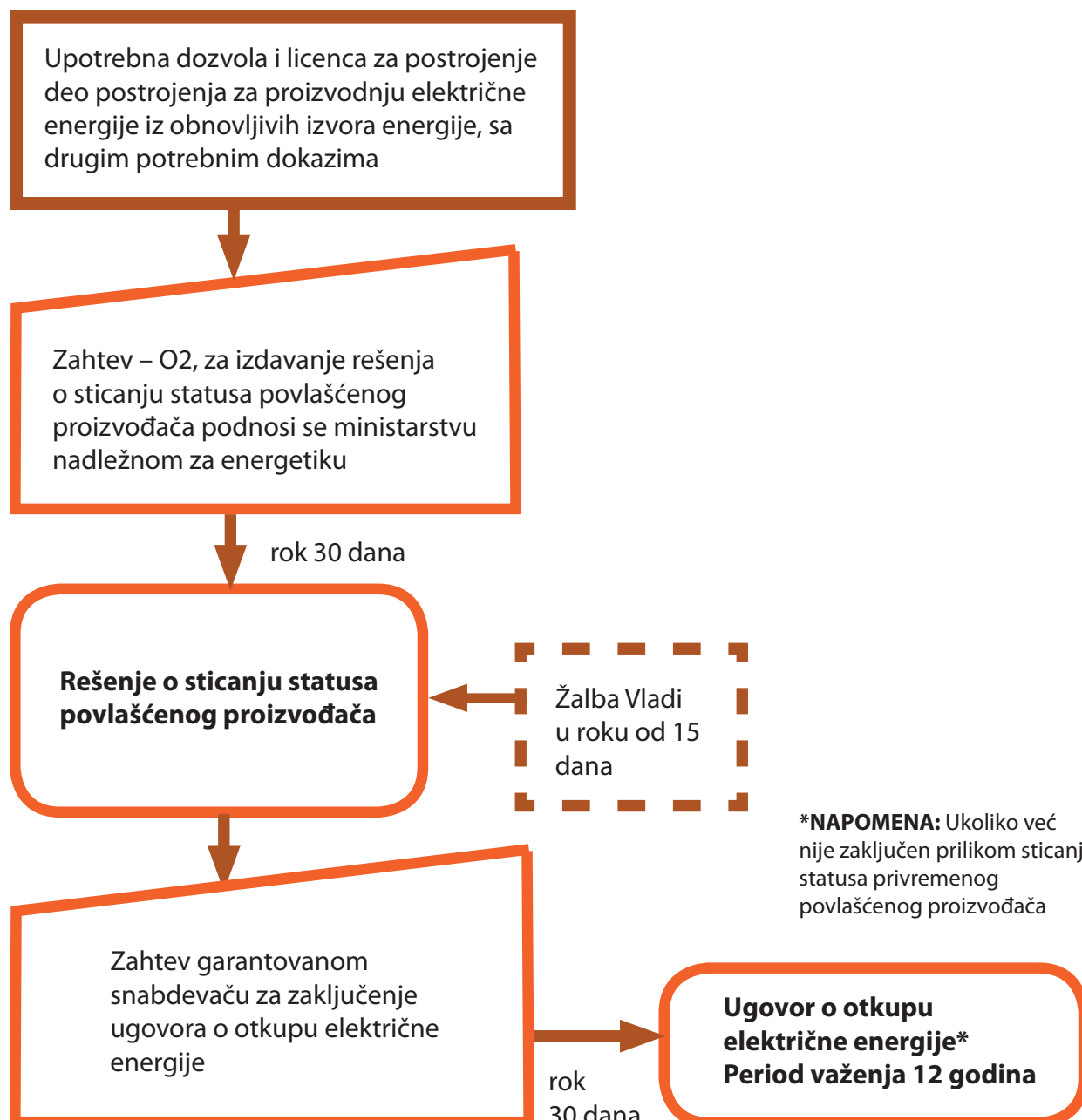
VI-1a,b Sticanje statusa (privremenog)* i statusa povlašćenog proizvođača električne energije



VI-1b Status povlašćenog proizvođača električne energije



VI-1b Sticanje statusa povlašćenog proizvođača električne energije



VI-1a,b Podsticajne mere

- **Pravo na podsticajne mere povlašćeni proizvođač električne energije i privremeni povlašćeni proizvođač ostvaruje zaključenjem ugovora o otkupu električne energije sa garantovanim snabdevačem.**
- **Podsticajne mere: 1) preuzimanje balansne odgovornosti, a od strane garantovanog snabdevača; 2) preuzimanje troškova balansiranja, a od strane garantovanog snabdevača; 3) podsticajni period koji traje 12 godina; 4) besplatan pristup prenosnom/distributivnom sistemu; 5) podsticajna otkupna cena.**

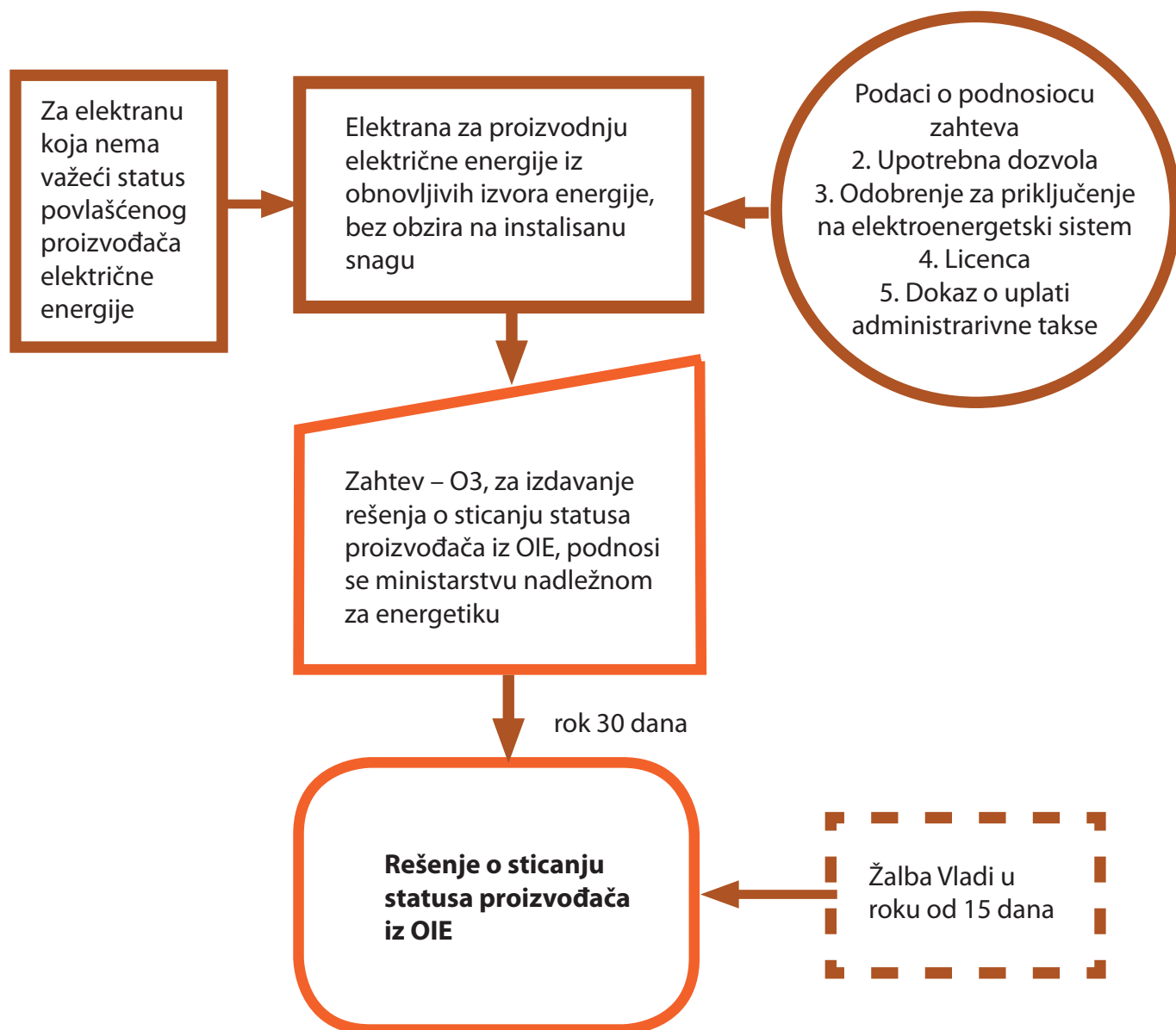
VI-1a,b Podsticajna otkupna cena

- Podsticajna otkupna cena za proizvedenu električnu energiju utvrđuje se u zavisnosti od vrste i instalisane snage elektrane, kao i maksimalnog efektivnog vremena rada za odgovarajuću vrstu elektrane.

Vrsta elektrane	Instalisana snaga P (MW)	Podsticajna otkupna cena (c€/kWh)	Maksimalno efektivno vreme rada (h)
Geotermalna elektrana	-	8,2	8600 u godini podsticajnog perioda

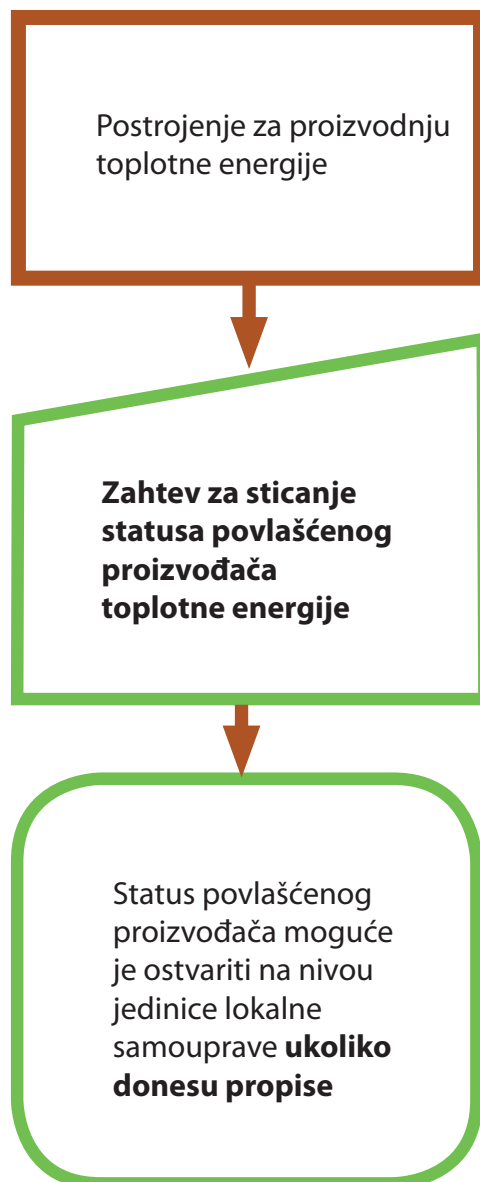
- Maksimalna proizvedena električna energija, koja se može otkupiti po podsticajnoj otkupnoj ceni, izračunava se kao: $E_{el\ max} = P * t_{max}$, gde je: $E_{el\ max}$ – maksimalna proizvedena električna energija za koju povlašćeni proizvođač električne energije ima pravo otkupa od strane garantovanog snabdevača po podsticajnim otkupnim cenama datim u tabeli, izražena u kWh; P – instalisana snaga elektrane, odnosno dela elektrane, izražena u kW; t_{max} – maksimalno efektivno vreme rada dato u tabeli, izraženo u h.
- Do isteka svake godine podsticajnog perioda, dodatnu proizvedenu električnu energiju u odnosu na maksimalnu proizvedenu električnu energiju, garantovani snabdevač kupuje po otkupnoj ceni koja iznosi 35% podsticajne otkupne cene. Povlašćeni proizvođači električne energije za rekonstruisane elektrane ostvaruju pravo na podsticajnu otkupnu cenu u iznosu od 70% vrednosti cene iz tabele. Privremeni povlašćeni proizvođač do početka podsticajnog perioda ostvaruje pravo na podsticajnu otkupnu cenu u iznosu od 50% vrednosti cene iz tabele.

VI-1c Sticanje statusa proizvođača električne energije iz obnovljivih izvora energije



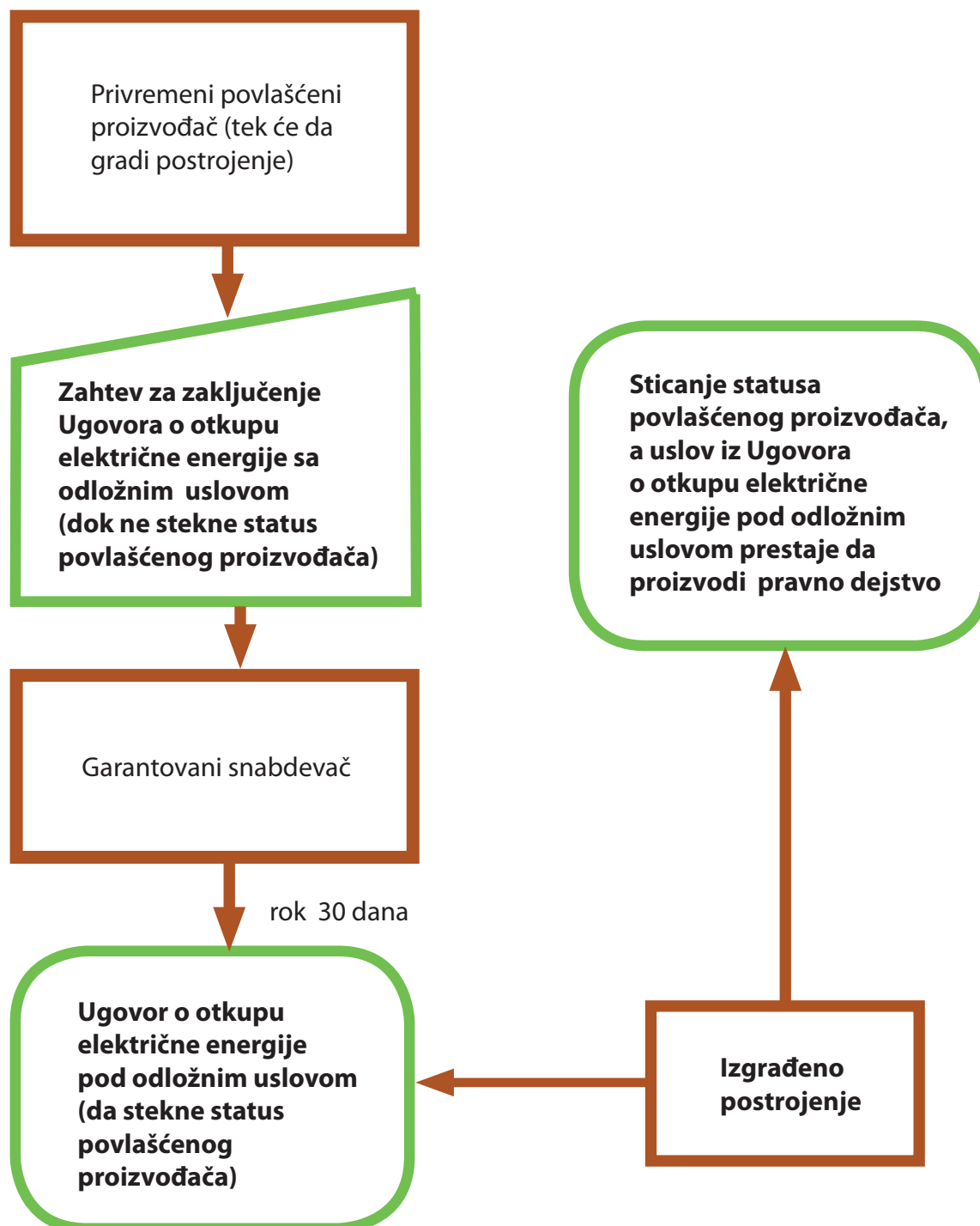
***NAPOMENA:** Ostvaruje pravo prvenstva pri preuzimanju ukupno proizvedene električne energije u prenosni ili distributivni sistem, osim u slučaju kada je ugrožena sigurnost rada tih sistema

VI-2 Sticanje statusa povlašćenog proizvođača toplotne energije



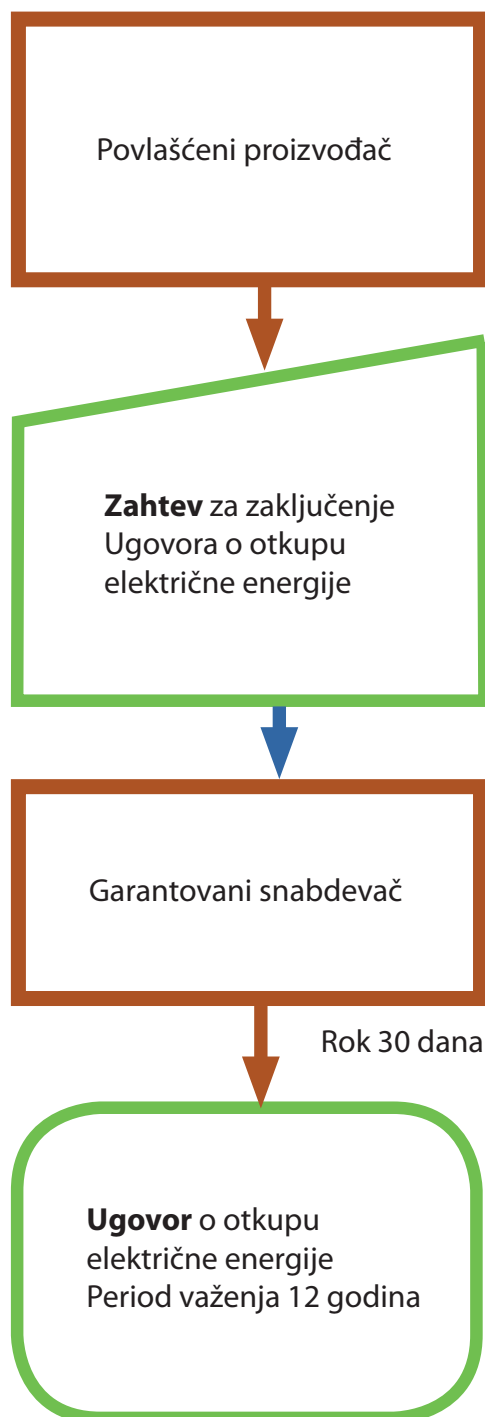
VII Proizvodnja i prodaja energije

VII-1 Ugovor o otkupu električne energije sa odložnim uslovom



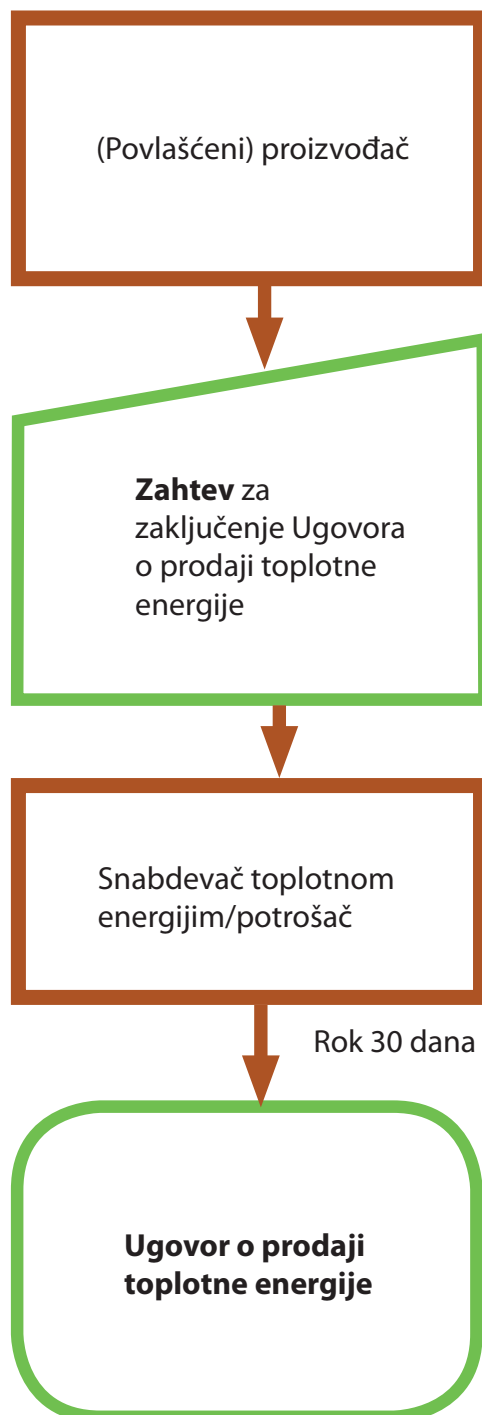
NAPOMENA: Postoje i slučajevi ugovora o otkupu proizvedene električne energije, pre sticanja statusa, radi realizacije priključenja na mrežu

VII-2 Ugovor o otkupu električne energije povlašćenog proizvođača električne energije



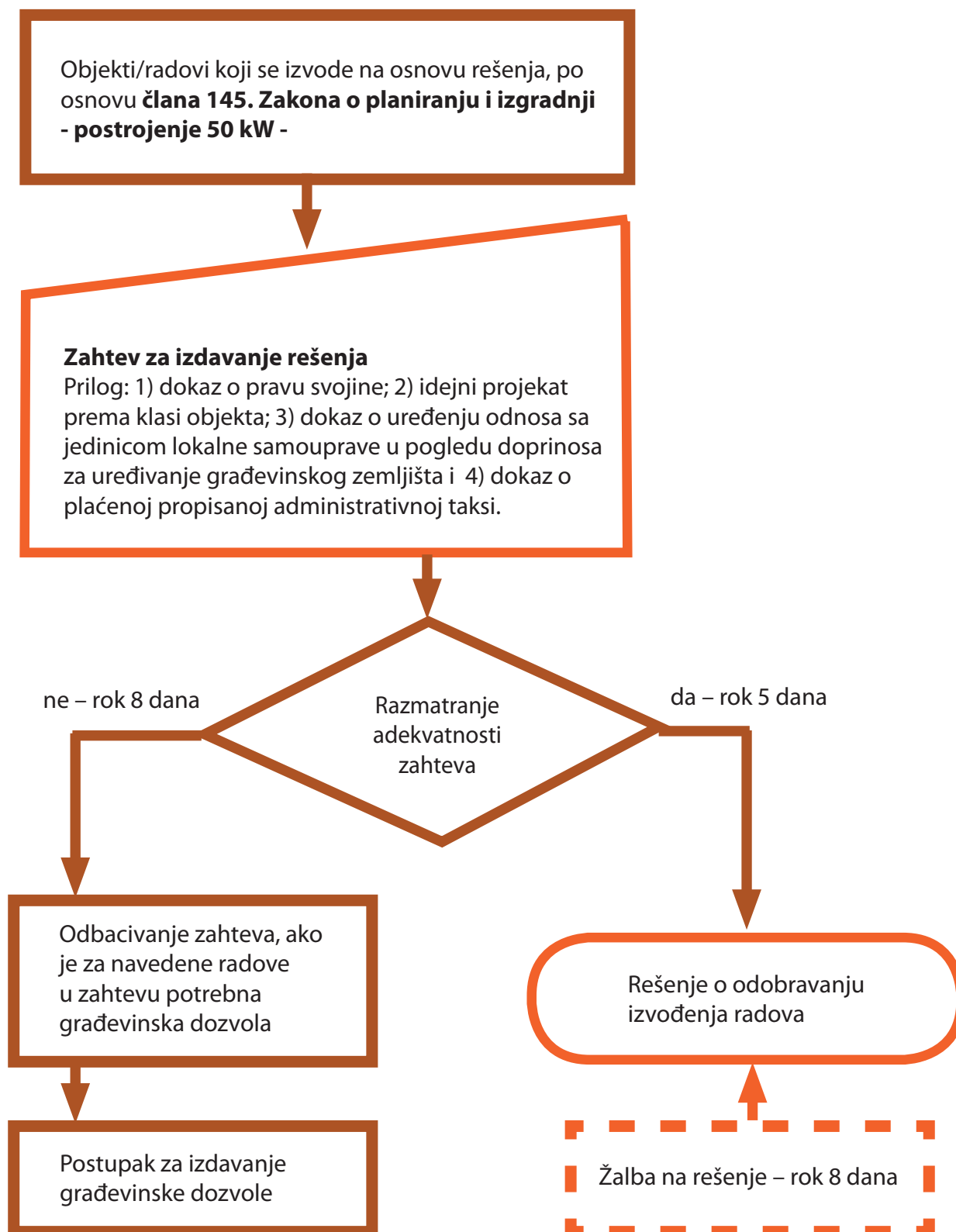
NAPOMENA: Postoje i slučajevi ugovora o otkupu proizvedene električne energije, pre sticanja statusa, radi realizacije priključenja na mrežu

VII-3 Ugovor o prodaji toplotne energije



VIII Posebni postupci

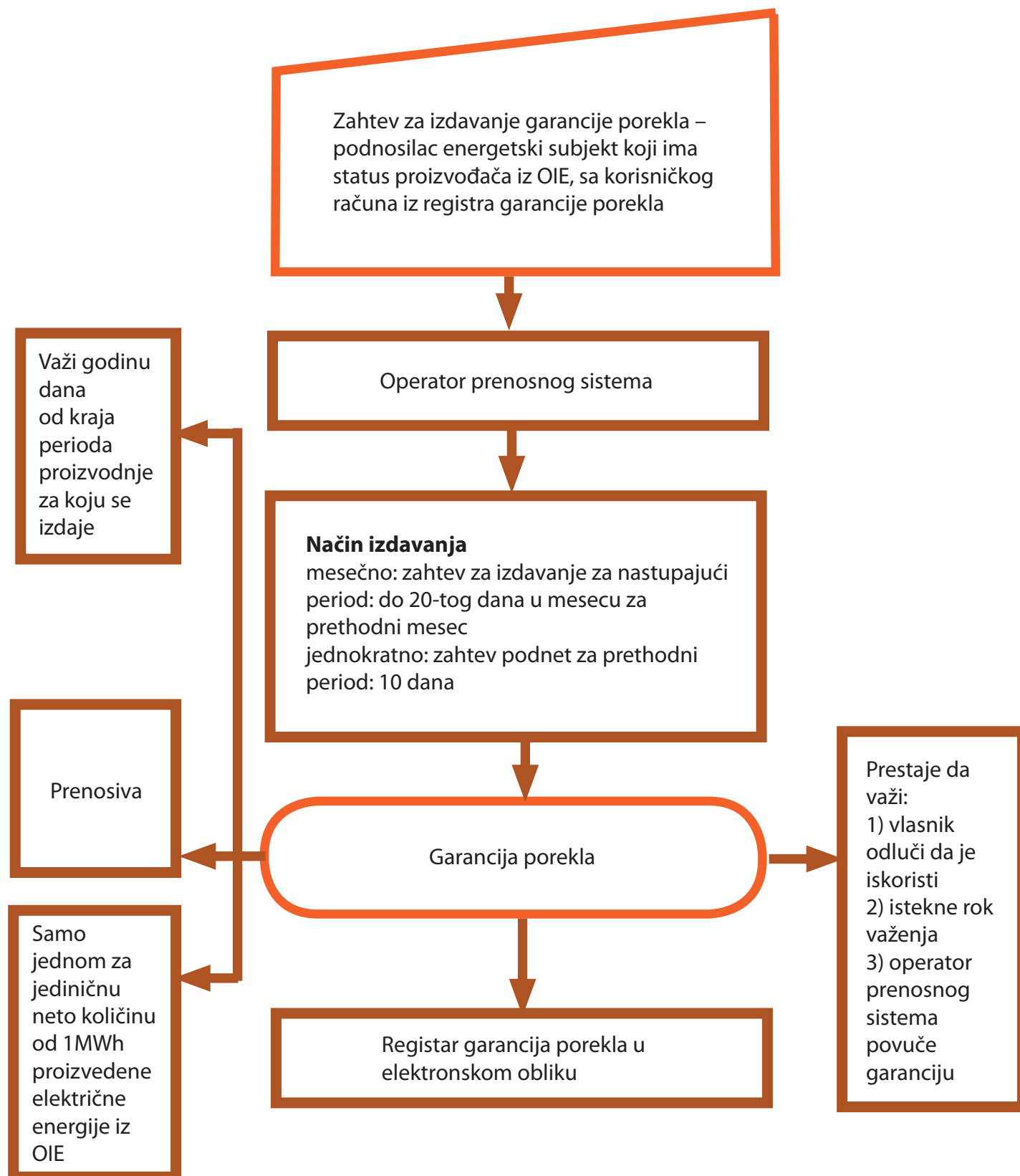
VIII-1 Poseban slučaj izgradnje postrojenja



VIII-2 Garancija porekla

- **Dokument koji ima isključivu funkciju da dokaže krajnjem kupcu da je električna energija proizvedena iz obnovljivih izvora energije / kombinovane proizvodnje električne i toplotne energije sa visokim stepenom iskorišćenja primarne energije.**
- **Garancija je dokument u elektronskom obliku.**
- **Garancija porekla izdata u drugim državama važi pod uslovima reciprociteta i u Republici Srbiji i u skladu sa potvrđenim međunarodnim ugovorom.**
- **Samo za proizvođača električne energije koji ima status proizvođača iz obnovljivih izvora.**

VIII-2 Izdavanje garancije porekla



Relevantni zakoni, strateška dokumenta, planovi i podzakonska akta

Zakoni

1. Zakon o energetici, Sl. glasnik RS, br. 145/14
2. Zakon o rudarstvu i geološkim istraživanjima, Sl. glasnik RS, br. 101/15
3. Zakon o prostornom planu Republike Srbije, Sl. glasnik RS, br. 88/10
4. Zakon o zaštiti životne sredine, Sl. glasnik RS, br. 135/04, 36/09 i 14/16
5. Zakon o integrisanom sprečavanju i kontroli zagađenja, Sl. glasnik RS, br. 135/04 i 25/15
6. Zakon o planiranju i izgradnji, Sl. glasnik RS, br. 72/09, 81/09, 64/10 - odluka US, 24/11, 121/12, 42/13 - odluka US, 50/13 - odluka US, 98/13 - odluka US, 132/14 i 145/14
7. Zakon o šumama, Sl. glasnik RS, br. 30/10 i 93/12
8. Zakon o vodama, Sl. glasnik RS, br. 30/10 i 93/12
9. Zakon o zaštiti prirode, Sl. glasnik RS, br. 36/09, 88/10, 91/10 i 14/16
10. Zakon o zaštiti vazduha, Sl. glasnik RS, br. 36/09 i 10/13
11. Zakon o proceni uticaja na životnu sredinu, Sl. glasnik RS, br. 135/04 i 36/09
12. Zakon o strateškoj proceni uticaja na životnu sredinu, Sl. glasnik RS, br. 135/04 i 88/10
13. Zakon o opštem upravnom postupku, Sl. glasnik RS, br. 18/16
14. Zakon o komunalnim delatnostima, Sl. glasnik RS, br. 88/11
15. Zakon o javno-privatnom partnerstvu i koncesijama, Sl. glasnik RS, br. 88/11 i 15/16
16. Zakon o privrednim društvima, Sl. glasnik RS, br. 36/11, 99/11 i 5/15
17. Zakon o javnim preduzećima, Sl. glasnik RS, br. 15/16
18. Zakon o banjama, Sl. glasnik RS, br. 80/92

Strateški dokumenti i planovi

1. Strategija razvoja energetike Republike Srbije, Sl. glasnik RS, br. 101/15
2. Nacionalni akcioni plan za obnovljive izvore energije, Sl. glasnik RS br. 53/13

Uredbe

1. Uredba o uslovima i postupku sticanja statusa povlašćenog proizvođača električne energije, privremenog povlašćenog proizvođača i proizvođača električne energije iz obnovljivih izvora energije, Sl. glasnik RS, br. 56/16
2. Uredba o utvrđivanju Liste projekata za koje je obavezna procena uticaja i Liste projekata za koje se može zahtevati procena uticaja na životnu sredinu, Sl. glasnik RS, br. 114/08
3. Uredba o režimima zaštite, Sl. glasnik RS, br. 31/12
4. Uredba o lokacijskim uslovima, Sl. glasnik RS, br. 35/15
5. Uredba o uslovima isporuke i snabdevanja električnom energijom, Sl. glasnik RS, br. 63/13
6. Uredba o podsticajnim merama za proizvodnju električne energije iz obnovljivih izvora i iz visokoefikasne kombinovane proizvodnje električne i toplotne energije, Sl. glasnik RS, br. 56/16

7. Uredba o ugovoru o otkupu električne energije, Sl. glasnik RS, br. 56/16
8. Uredba o naknadi za podsticaj povlašćenih proizvođača električne energije, Sl. glasnik RS, br. 12/16
9. Uredba o visini posebne naknade za podsticaj u 2016. godini, Sl. glasnik RS, br. 12/16

Pravilnici

1. Pravilnik o energetske dozvoli, Sl. glasnik RS, br. 15/15
2. Pravilnik o sadržini projekata geoloških istraživanja i elaborata o rezultatima geoloških istraživanja, Sl. glasnik RS, br. 51/96
3. Pravilnik o sadržini informacije o lokaciji i o sadržini lokacijske dozvole, Sl. glasnik RS, br. 3/10
4. Pravilnik o sadržini, načinu i postupku izrade i način vršenja kontrole tehničke dokumentacije prema klasi i nameni objekata, Sl. glasnik RS, br. 23/15
5. Pravilnik o klasifikaciji objekata, Sl. glasnik RS, br. 22/15
6. Pravilnik o opštim pravilima za parcelaciju, regulaciju i izgradnju, Sl. glasnik RS, br. 22/15
7. Pravilnik o sadržini i obrascu zahteva za izdavanje vodnih akata i sadržini mišljenja u postupku izdavanja vodnih akata, Sl. glasnik RS, br. 74/10, 116/12 i 58/14
8. Pravilnikom o sadržini zahteva o potrebi procene uticaja i sadržini zahteva za određivanje obima i sadržaja Studije o proceni uticaja na životnu sredinu, Sl. glasnik RS, br. 69/05
9. Pravilnik o sadržini studije o proceni uticaja na životnu sredinu, Sl. glasnik RS, br. 69/05
10. Pravilnik o sadržini i načinu izdavanja građevinske dozvole, Sl. glasnik RS, br. 93/11 i 103/13 – odluka US
11. Pravilnik o postupku sprovođenja objedinjene procedure elektronskim putem, Sl. glasnik RS, br. 113/15
12. Pravilnik o načinu zatvaranja i obeležavanju zatvorenog gradilišta, Sl. glasnik RS, br. 22/15
13. Pravilnik o sadržini i načinu vršenja tehničkog pregleda objekta, sastavu komisije, sadržini predloga komisije o utvrđivanju podobnosti objekta za upotrebu, osmatranju tla i objekta u toku građenja i upotrebe i minimalnim garantnim rokovima za pojedine vrste objekata, Sl. glasnik RS, br. 27/15
14. Pravilnik o minimalnim garantnim rokovima za pojedine vrste objekata odnosno radova, Sl. glasnik RS, br. 93/11
15. Pravilnik o licenci za obavljanje energetske delatnosti i sertifikaciji, Sl. glasnik RS, br. 87/15
16. Odluka o utvrđivanju metodologije za određivanje troškova priključenja na sistem za prenos i distribuciju električne energije, Sl. glasnik RS, br. 109/15





**CONSTRUCTION OF PLANTS AND ELECTRICITY/
HEAT GENERATION FROM HYDRO-GEOTHERMAL
SOURCES IN THE REPUBLIC OF SERBIA**

Guide for investors

- amended and extended version 2016 -

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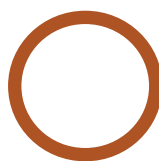
Legend of symbols used in diagrams presenting the steps within the procedures



Symbol denoting the application filed by the investor to the competent authorities, authorized organizations, bodies or enterprises



Symbol denoting a question which opens up in the course of the procedure



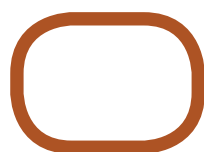
Symbol denoting requirements and input elements of act under consideration



Symbol denoting a positive activity of the competent authority, authorized organization, body or enterprise



Symbol denoting other steps in the specific procedure



Symbol denoting administrative act resulting from the undertaken procedure

Foreword

The United Nations Development Programme (UNDP), acting as an implementing agency of the Global Environment Facility (GEF) is implementing the GEF funded project “Reducing Barriers to Accelerate the Development of Biomass Markets in Serbia” in close partnership with the Ministry of Mining and Energy and the Ministry of Agriculture and Environmental Protection of the Republic of Serbia.

The objective of the Biomass Project is to increase the share of energy from renewable sources in the energy mix of Serbia, namely the share of biomass in power generation.

One of project activities is focused on enhancing the capacity of all relevant stakeholders to develop, finance, construct and operate bankable biomass renewable energy projects. To that end an update and revision of six existing, yet outdated guides for investors in renewable energy facilities has been performed:

1. CONSTRUCTION OF PLANTS AND ELECTRICITY/HEAT GENERATION FROM BIOMASS IN THE REPUBLIC OF SERBIA
2. CONSTRUCTION OF FACILITIES AND ELECTRIC POWER GENERATION IN SMALL HYDRO-POWER PLANTS IN THE REPUBLIC OF SERBIA
3. CONSTRUCTION OF PLANTS AND ELECTRICITY GENERATION IN WIND POWER PLANTS IN THE REPUBLIC OF SERBIA
4. CONSTRUCTION OF PLANTS AND ELECTRICITY/HEAT GENERATION FROM HYDRO-GEOTHERMAL SOURCES IN THE REPUBLIC OF SERBIA
5. CONSTRUCTION OF PLANTS AND ELECTRICITY GENERATION IN WIND POWER PLANTS IN THE REPUBLIC OF SERBIA
6. CONSTRUCTION OF SOLAR HEATING SYSTEMS IN THE REPUBLIC OF SERBIA

All guides are bilingual and, except for one, were delivered in two versions. Six detailed guides describe in details the comprehensive procedure for constructing the energy facilities and performing economic activity of energy generation from renewable sources. Detailed guides are intended primarily to investors and project developers, but also to officials in different competent institutions since the legal procedure is cross-sectoral. In five less detailed guides the comprehensive matter is described in simpler and illustrative manner with an idea to get this topic closer to the wide range of stakeholders.

The objective of the guides is to encourage and assist the investors interested in the Serbian renewable energy sector, but also to identify through thorough analysis weakness and inconsistencies of the procedure and to encourage competent institutions to perform legal and institutional improvements. We sincerely hope that the guides will trigger constructive dialog between the numerous stakeholders and thus contribute to their better awareness and mutual understanding, which ultimately should result in favorable environment for investments in renewable energy.

I Energy from geothermal sources

- **Geothermal energy is heat accumulated in dry rocks and fluids of the Earth's crust, resulting from continued radiation of heat from inside the Earth**
- **Geothermal energy can be:**
 - Hydrogeothermal energy – accumulated in ground waters
 - Petrogeothermal energy – accumulated in rock formations

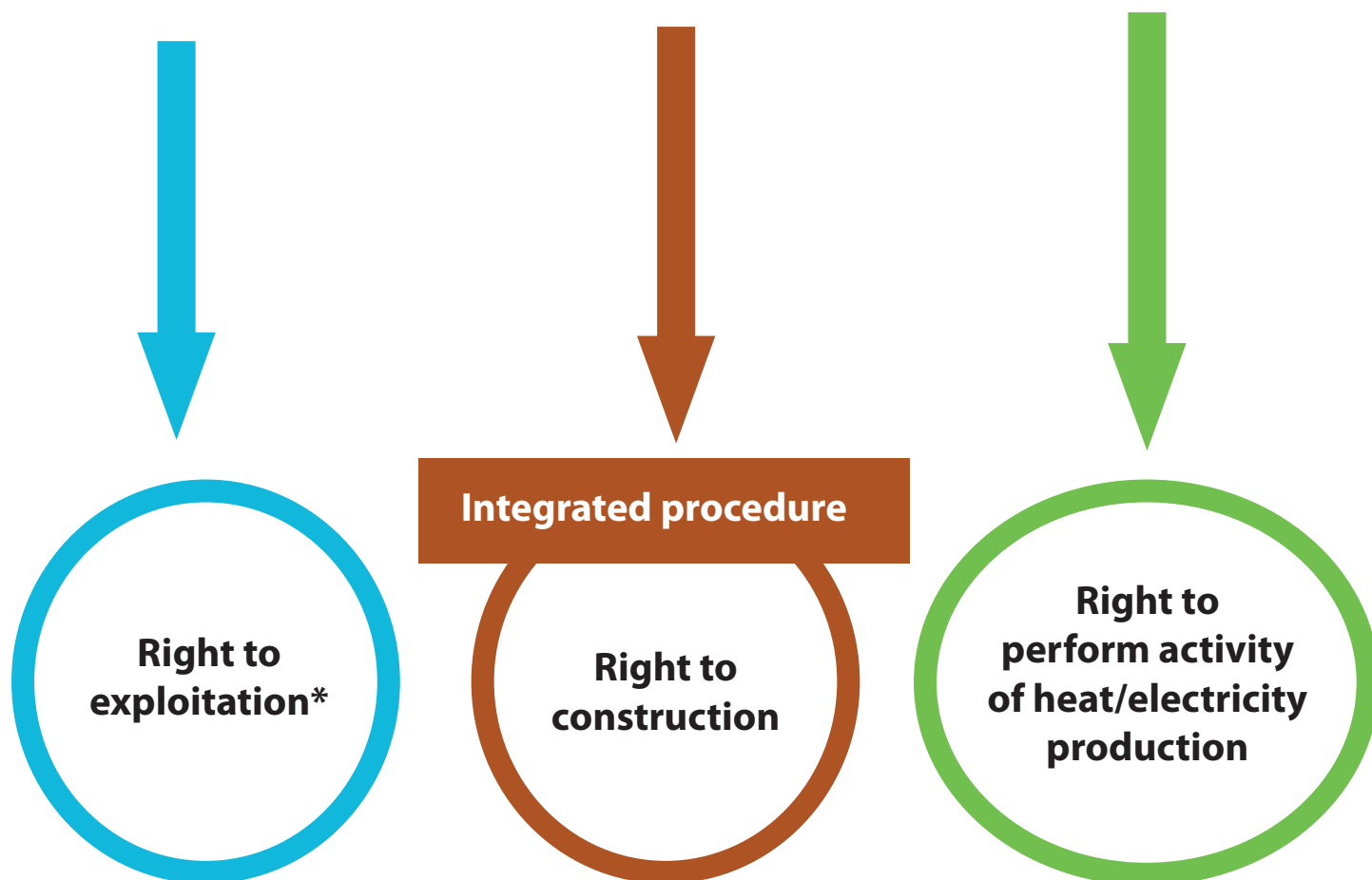
I Hydrogeothermal energy

- **Hydrogeothermal energy is a form of renewable energy sources**
- **Hydrogeothermal energy can be used directly, and indirectly for generation of heat and electricity**

NOTE: it should be noted that this Guide refers to all plants using hydrogeothermal energy and that it describes procedures before competent authorities and institutions, while certain parts of these procedures, as well as the implementation of certain procedures depend on the size of facilities, the location where the facility is constructed, the specific technology for energy generation and other characteristics of the plant using hydrogeothermal energy.

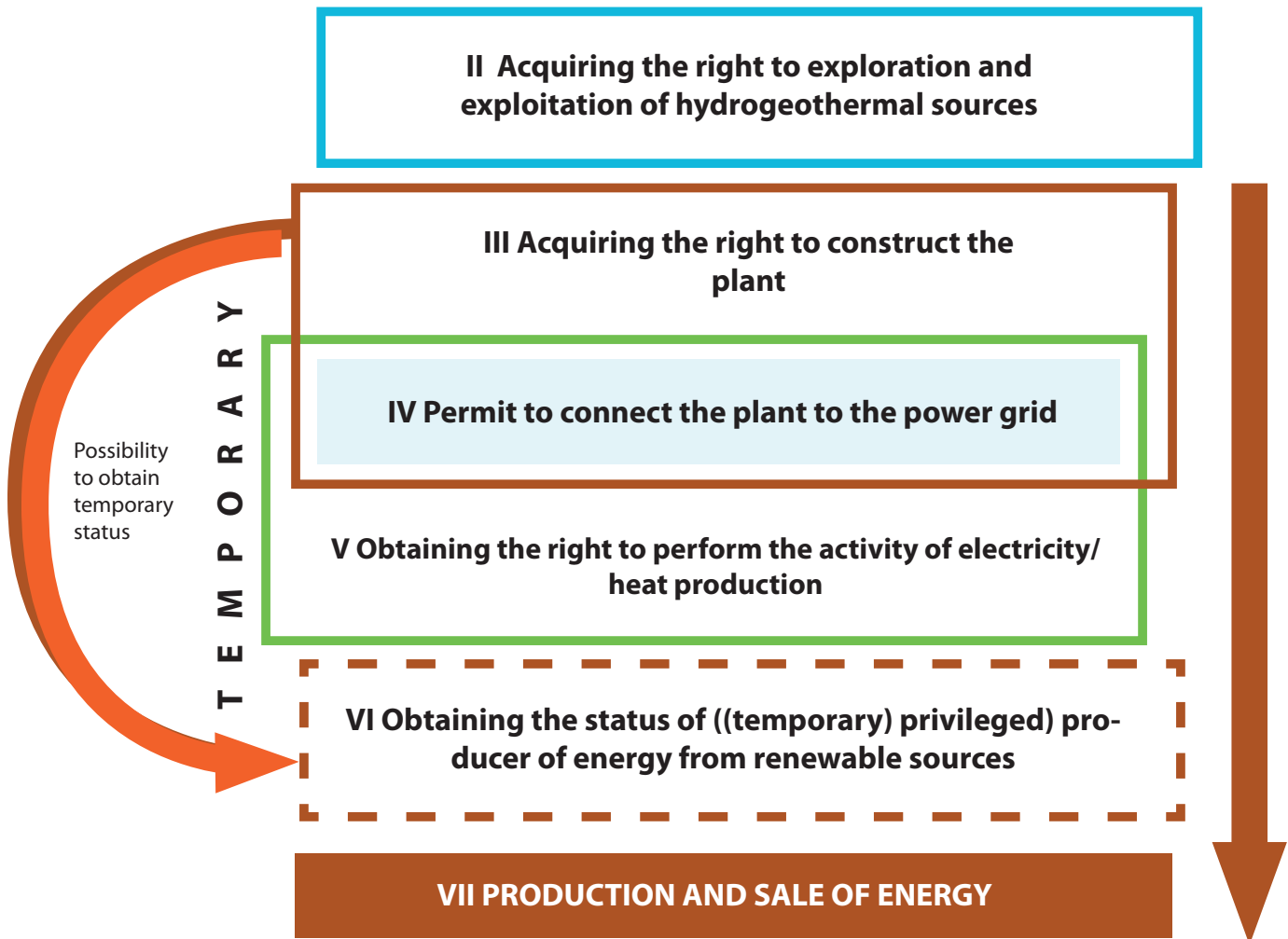
I Production of energy from hydrogeothermal sources

The Investor is to obtain the following rights:



***NOTE:** can be acquired on the basis of the Law on mining and Geological Explorations, or on the basis of the Law on Public-Private Partnership

I Key steps from the idea to the operation of the plant



II Acquiring the right to exploration and exploitation of hydrogeothermal sources



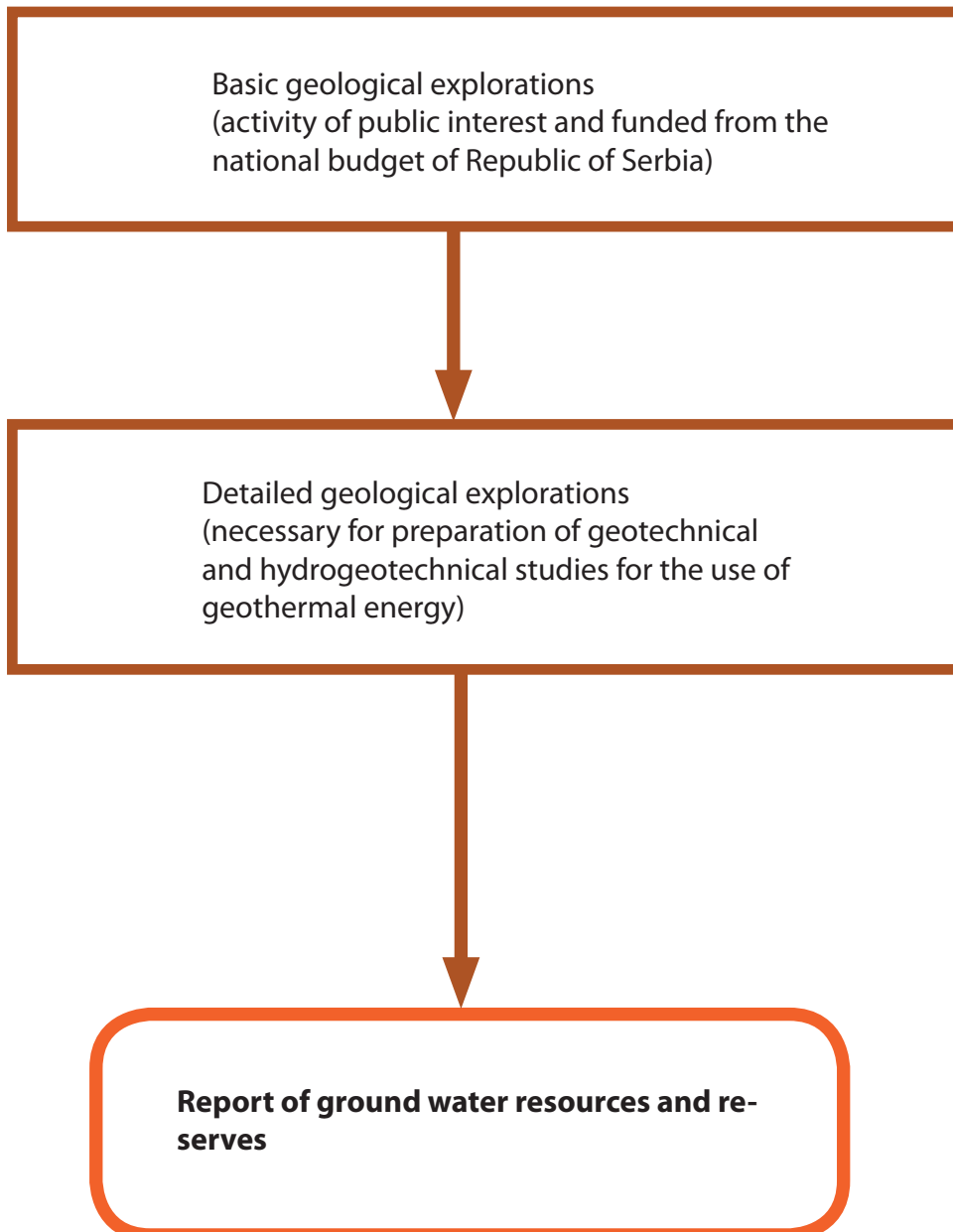
II Acquiring the right to exploration and exploitation of hydrogeothermal sources

- **I-1 Geological explorations**
 - Design of geological explorations
 - Permit for geological explorations
 - Classification of ground waters and geothermal resources

- **I-2 Exploitation of hydrogeothermal energy***
 - Permit for the exploitation field/Permit for exploitation
 - Permit to construct mining facilities/perform mining works
 - Operation permit for mining facility
 - Mining rights license

II-1 Geological explorations

Geological explorations are preformed in order to determine the hydrogeologic potential of the deposit.



The Study includes
(among other things):

- 1) data on geologic and hydro-geologic characteristics of deposits;
- 2) quality and quantity of explored ground water resources;
- 3) classification of resources;
- 4) Technical potential and requirements for exploitation;
- 5) expected economic benefits.

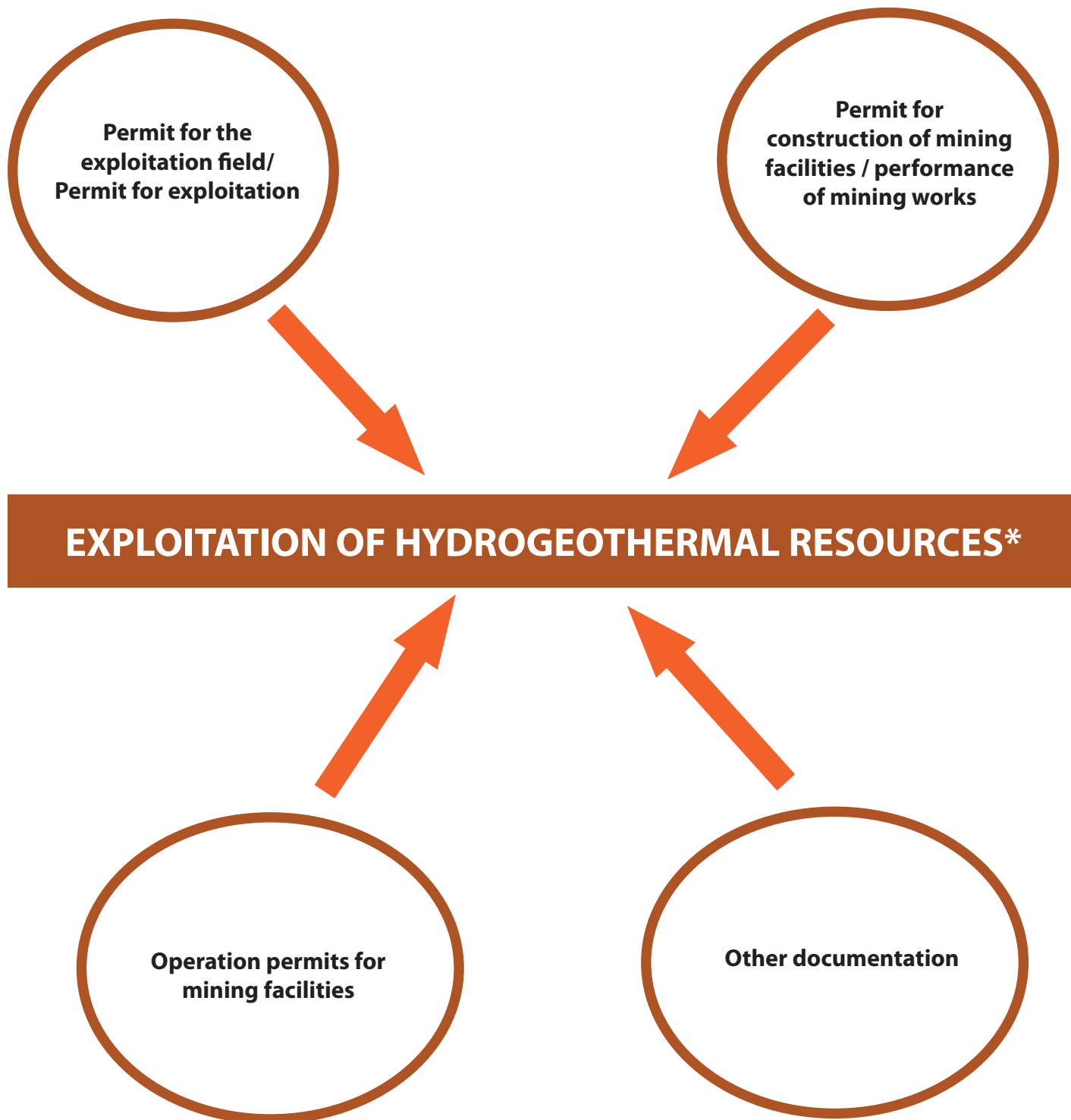
II-1 Permit for geologic explorations



***NOTE:** the duration of explorations is determined at two years and can be extended two times under the prescribed conditions

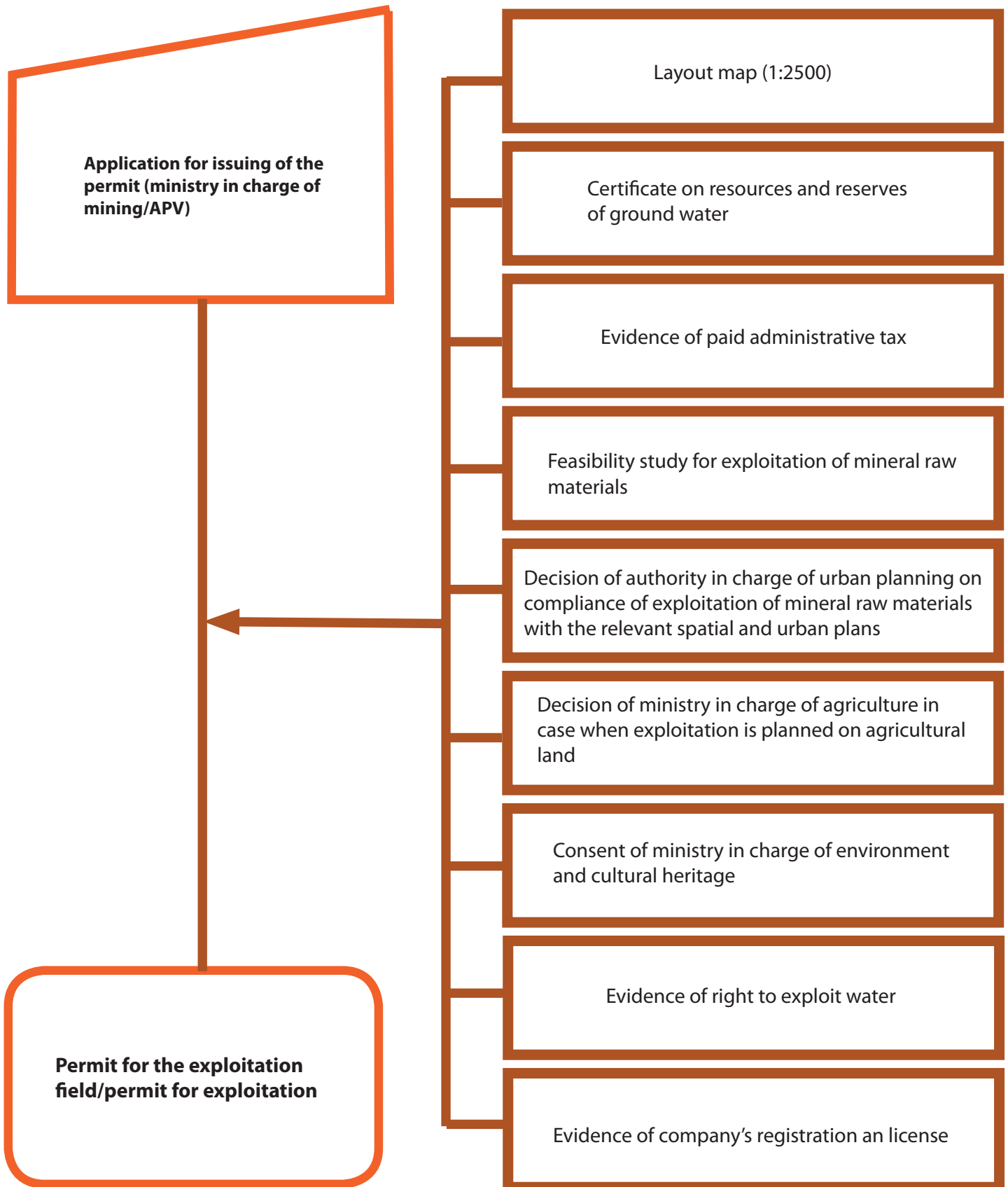
II-2 Exploitation of hydrogeothermal energy

Exploitation of hydrogeothermal energy is deemed to include performance of mining works for preparation, boring exploitation and utilization of hydrogeothermal resources of high enthalpy

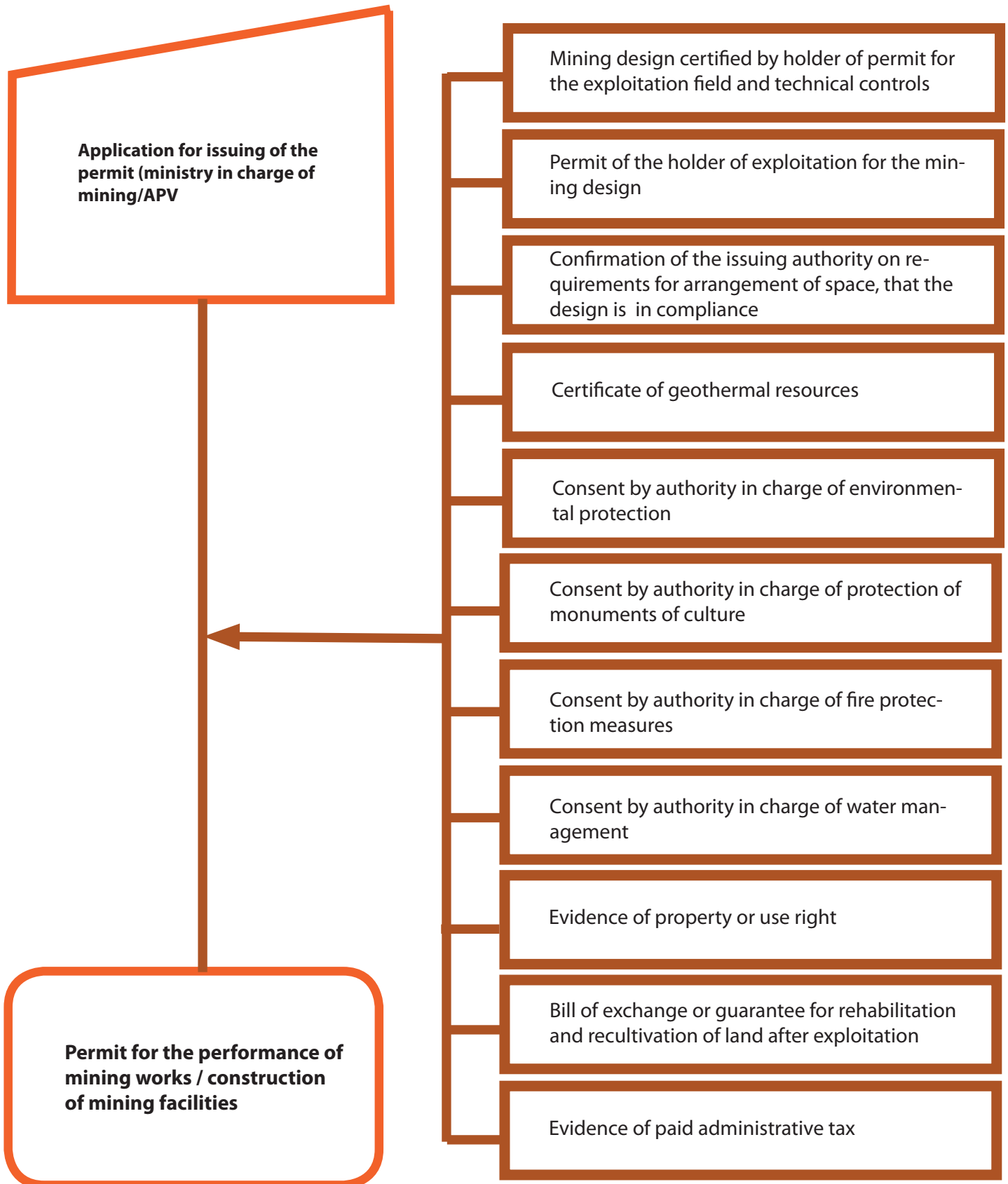


***NOTE:** In line with the Law on Mining of 2015, no fees are imposed for exploitation of hydrogeothermal resources

II-2 Permit for the exploitation field / Permit for exploitation



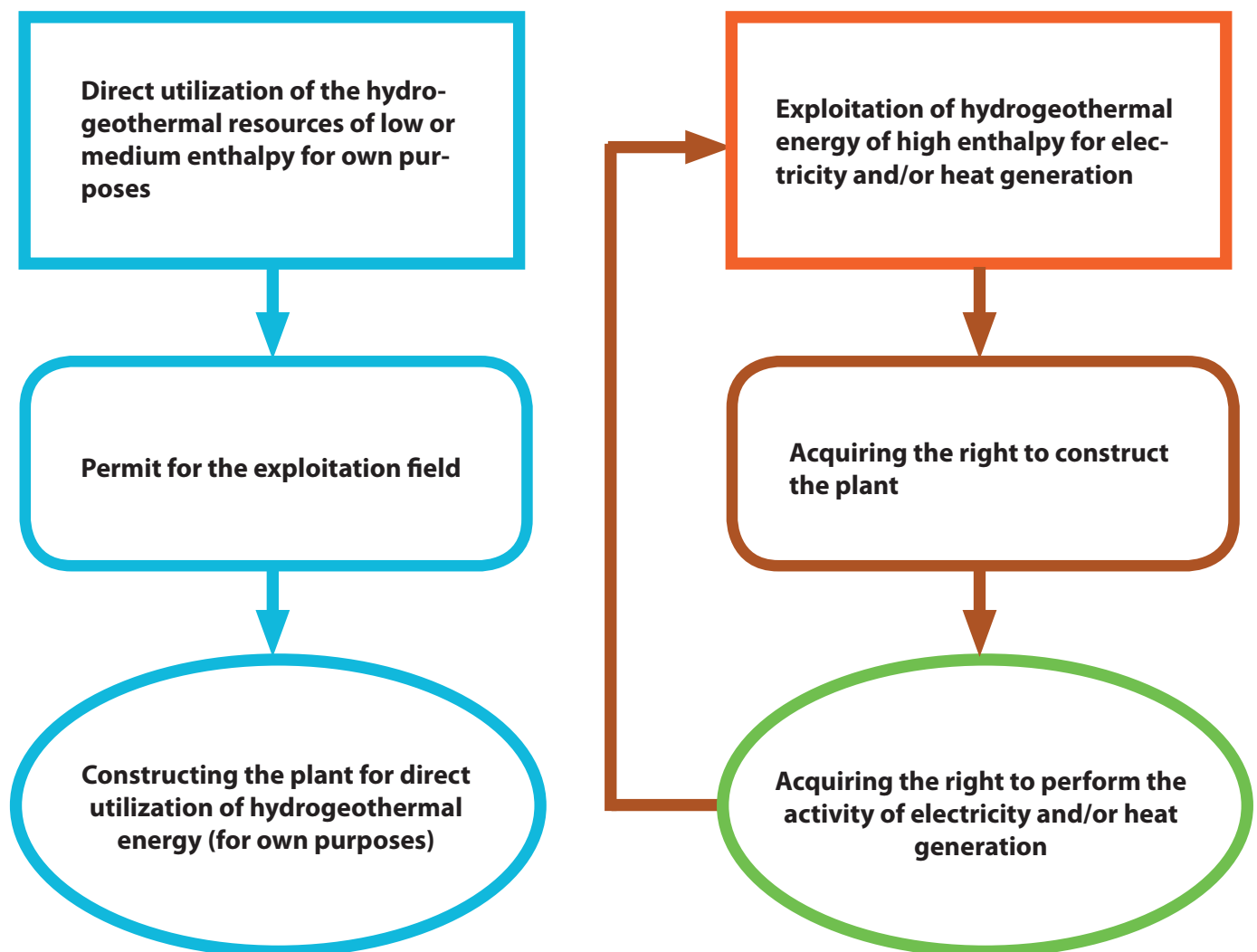
II-2 Permit for performance of mining works/ construction of mining facilities



II-3 Mining facilities

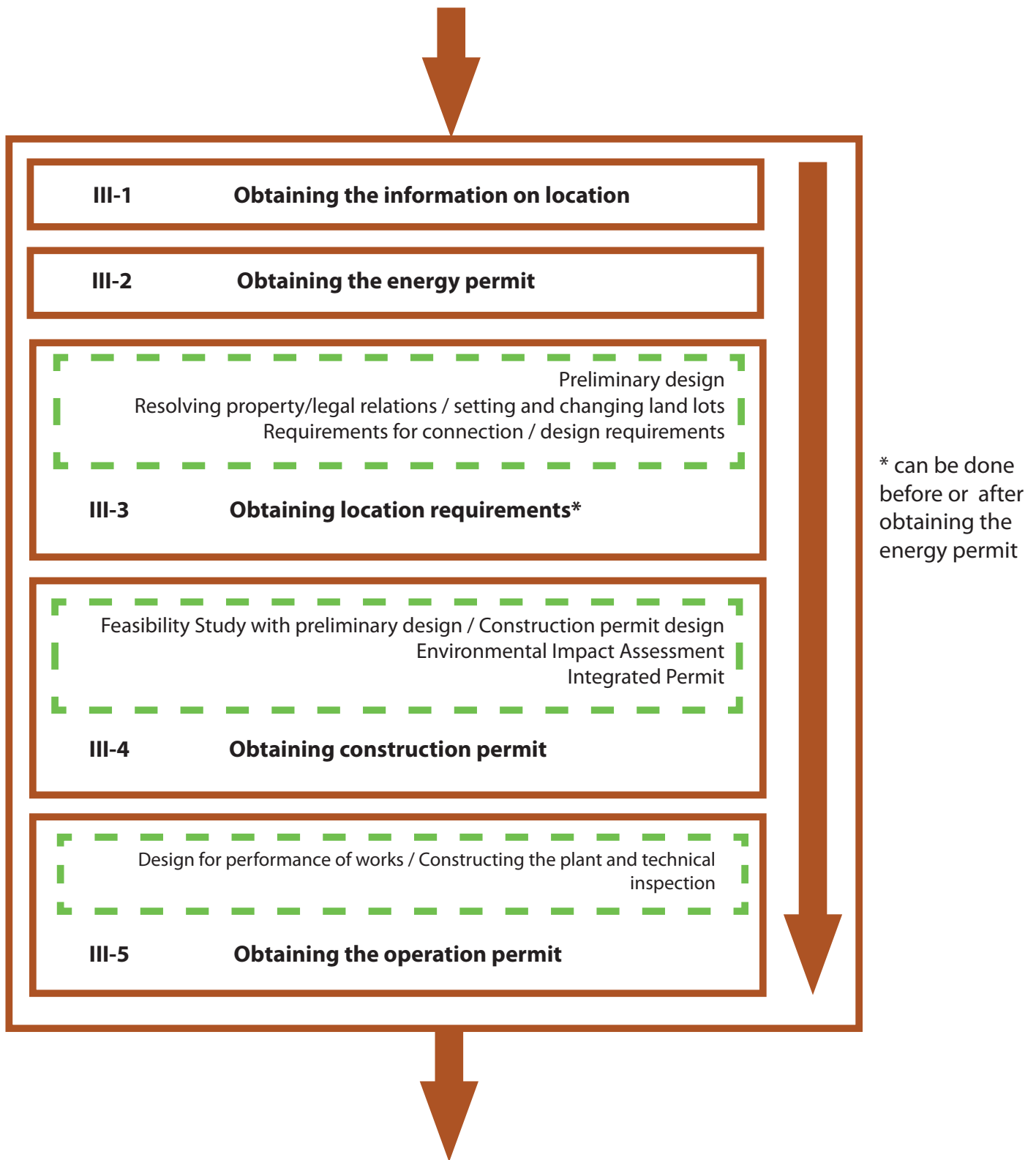
- **Mining facilities are related directly to the technological processes of exploration, exploitation and transport of ground waters in the exploitation field, as well as plant and devices for exploitation of (hydro) geothermal resources or other mineral raw materials by means of piping systems or boreholes**
- **Operation permit for mining facilities is a decision issued by the ministry in charge of mining and it allows the use of the mining facility or parts thereof**

II Utilization: Exploitation of hydrogeothermal energy



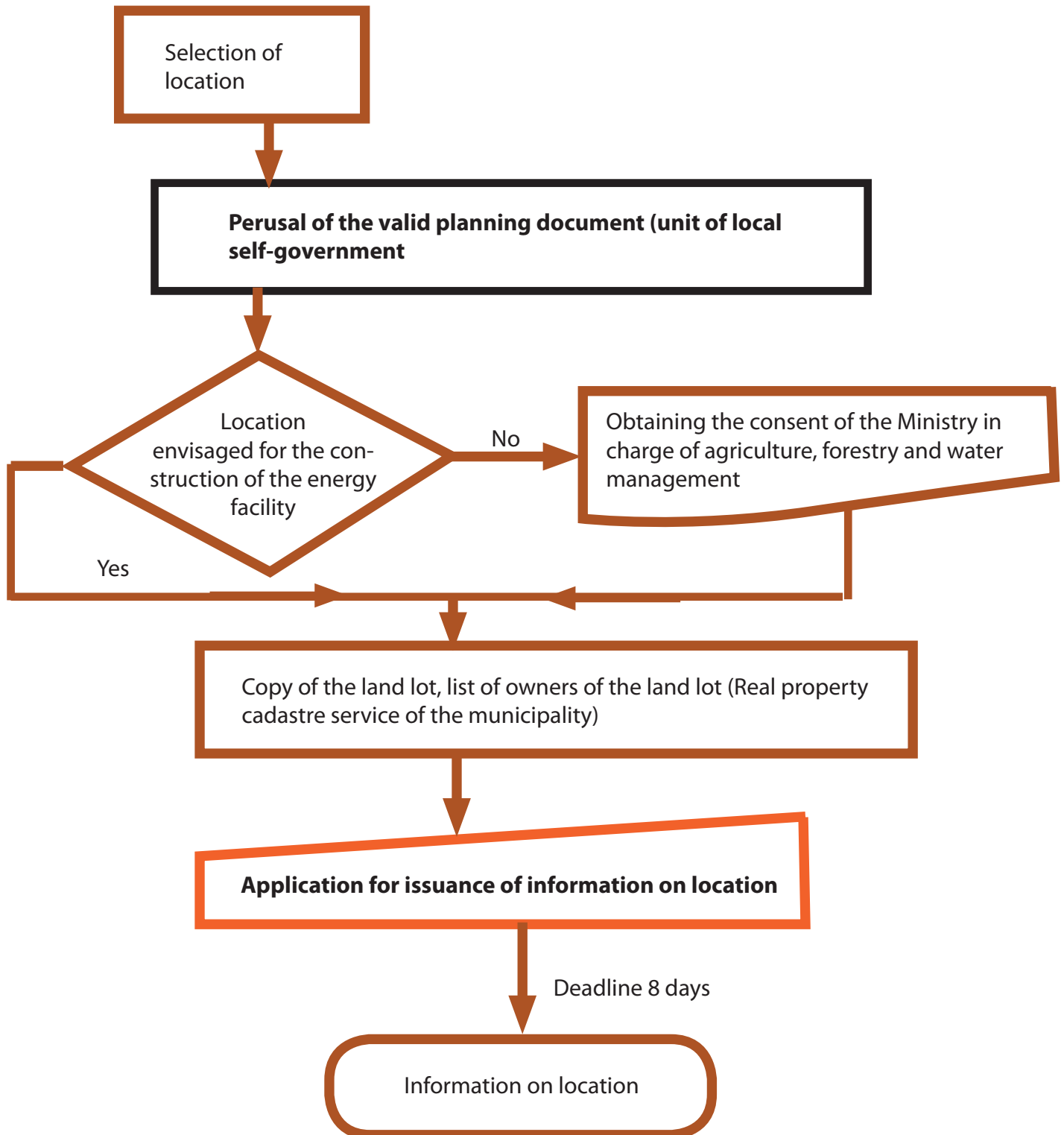
III Acquiring the right to construct the plant





III-1 Selection of location, perusal of the valid planning documents, and information on location

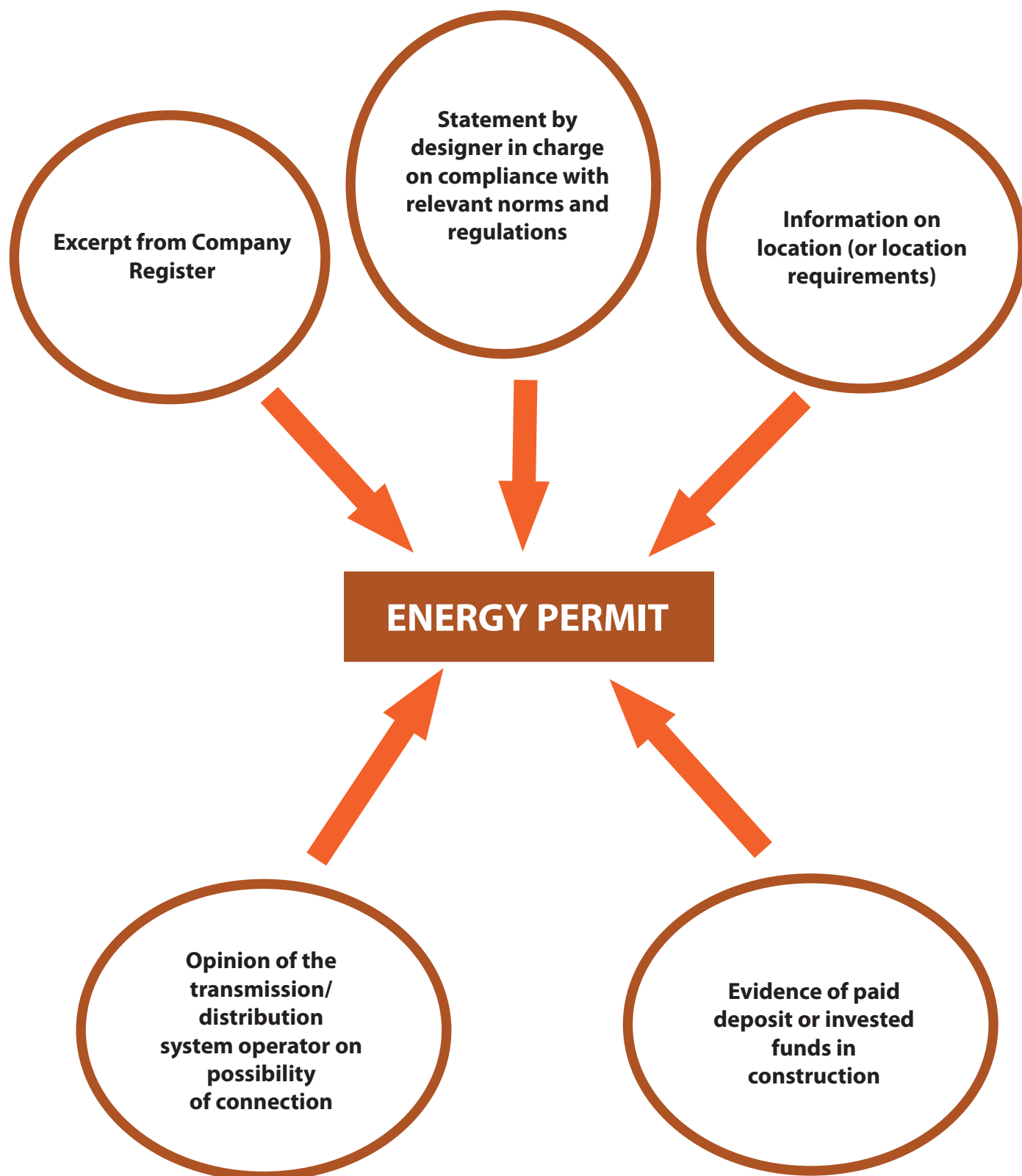
Analysis and selection of potential location for the construction of the plant are the first steps, and they are important as they decide on the elaboration of technical documentation for the construction of the plant



II-2 The energy permit

- **The Energy Permit is an act which is a pre-requisite for obtaining the Construction Permit**
- **The Energy Permit is not necessary for facilities of capacity under 1 MW.**

NOTE: The Energy Permit is not necessary if the facility is constructed through a public/private partnership or concession



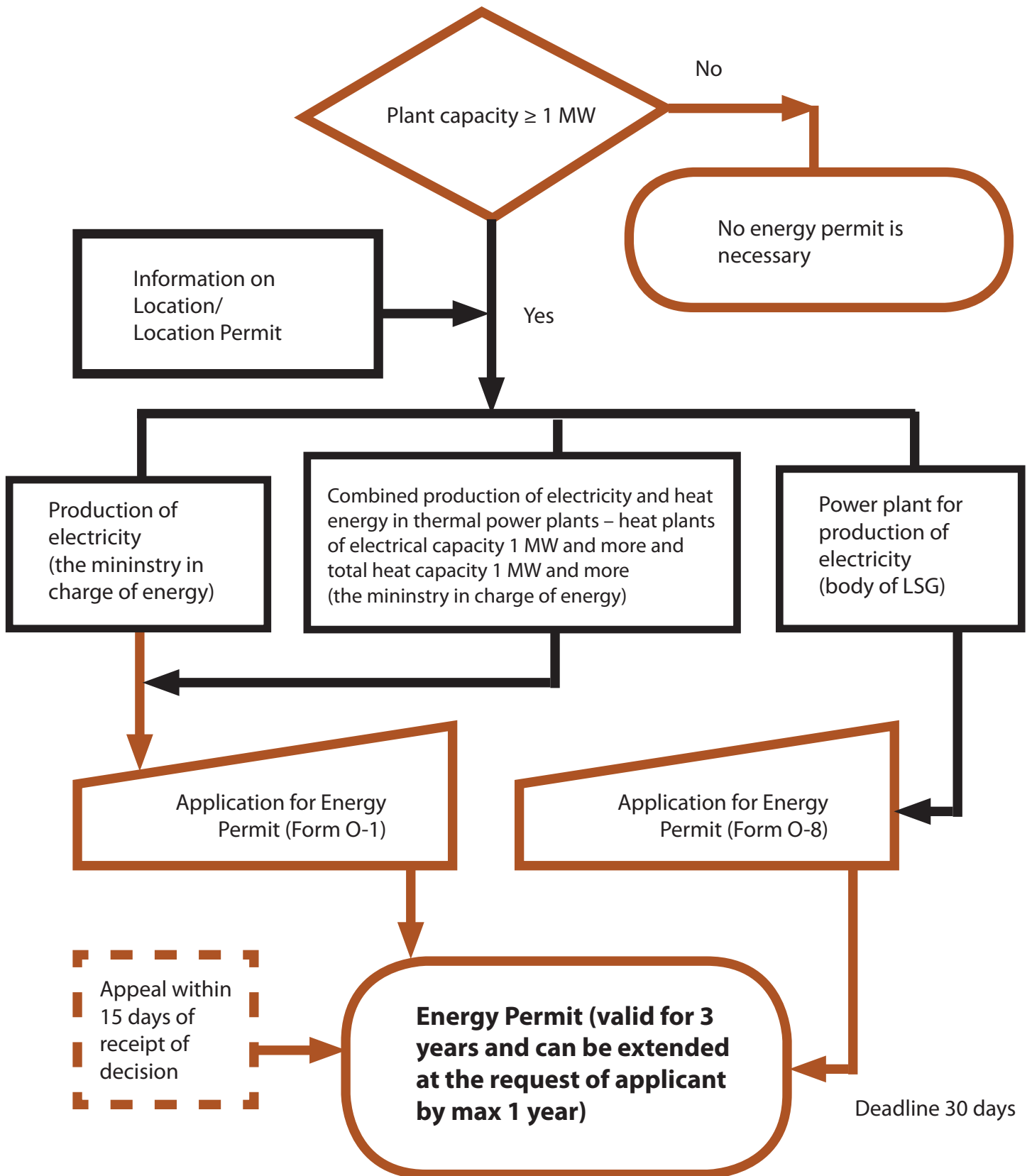
III-2 Opinion of system operator on connection of the energy facility to the energy system

- **The Opinion of the system operator regarding the conditions and possibilities for connection to the power system is an act necessary for the obtaining of the energy permit.**
- **Application:**
 - Filed to: the operator of the system to whose power system the biomass/biogas facility is to be connected, filed on a prescribed form.
 - Content of application: defined by acts of the system operator*.
 - Deadline for issuing of the Opinion:
 - Transmission network: 90 days of the date of advance payment, to the account of the operator of the transmission system, for the preparation of the Study for Connection of the Facility to the transmission system, based on the Contract for the Study on Connection.
 - Distribution system: 30 days of submission of application.
 - Validity: determined in the act itself.

Note: The issuing of this act is prescribed by the Rulebook on Energy Permits, but the conditions and the procedure and method of issuance of this Opinion are not prescribed in government regulations, but only by the system operator to whose system the connection is to be made.

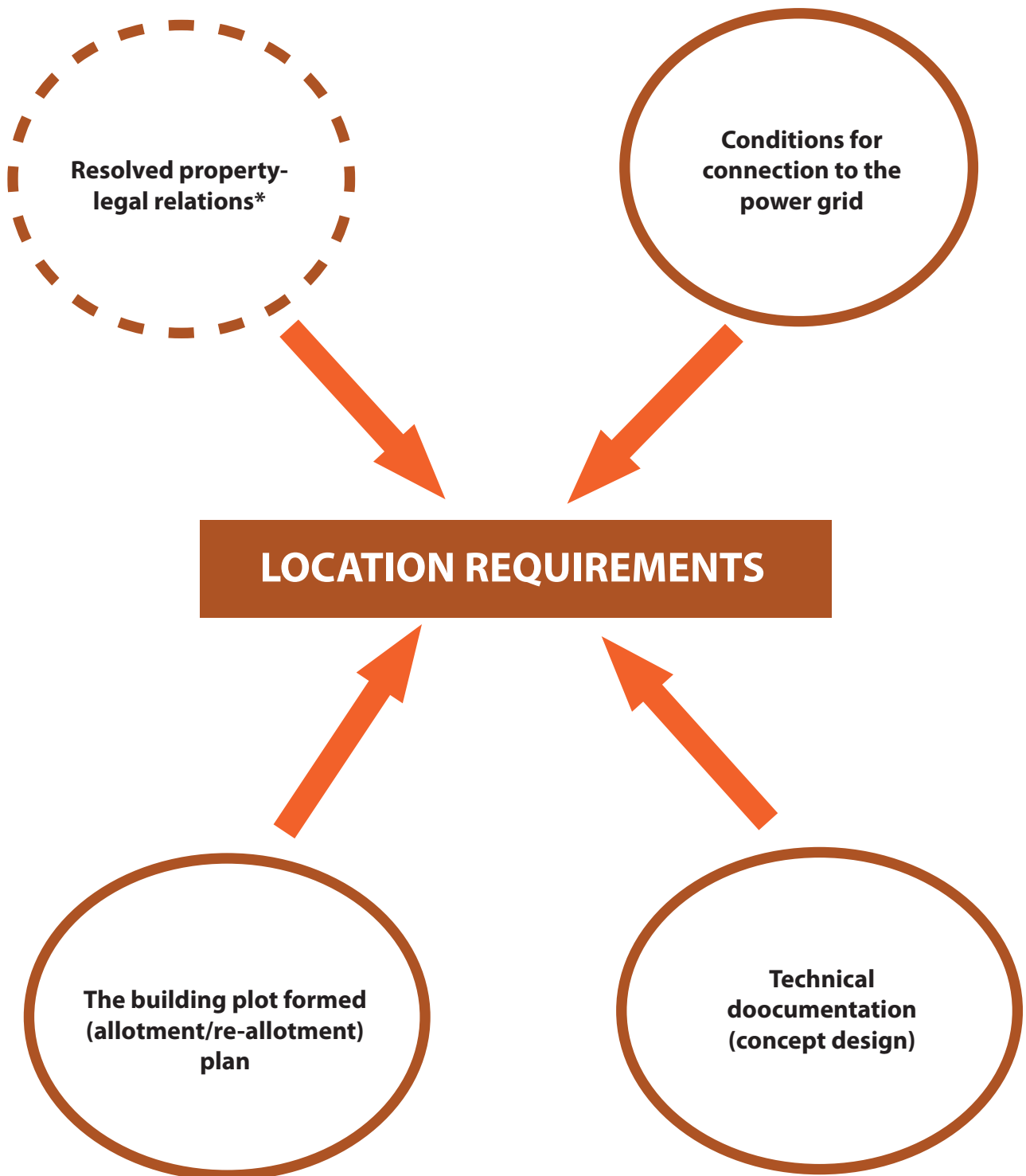
*more details at: www.ems.rs i www.eps.rs

II-2 Acquiring the energy permit



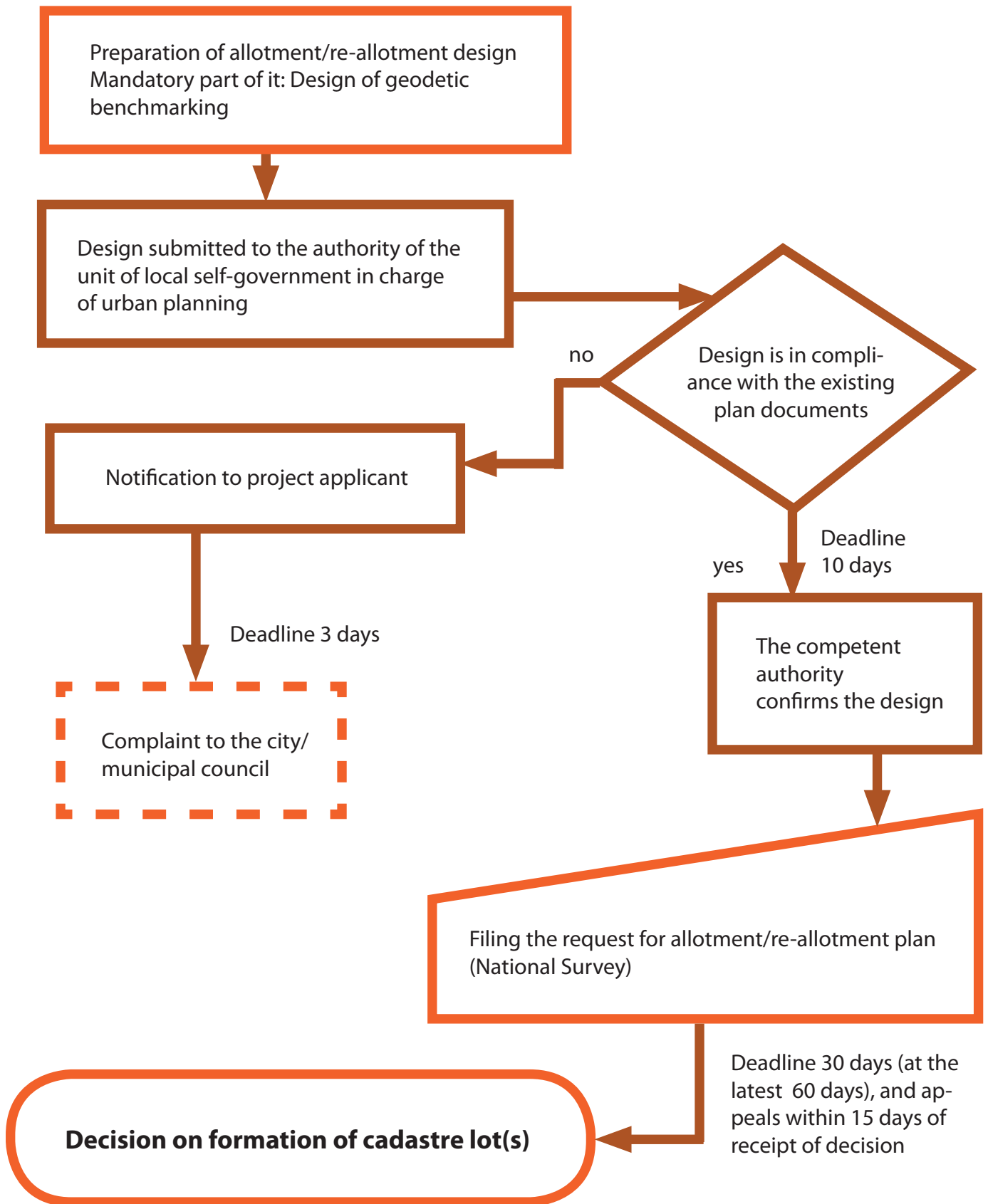
III-3 Location Requirements

Location requirements contain all requirements and data necessary for the elaboration of technical documentation, primarily the design for construction permit, in compliance with valid planning documents

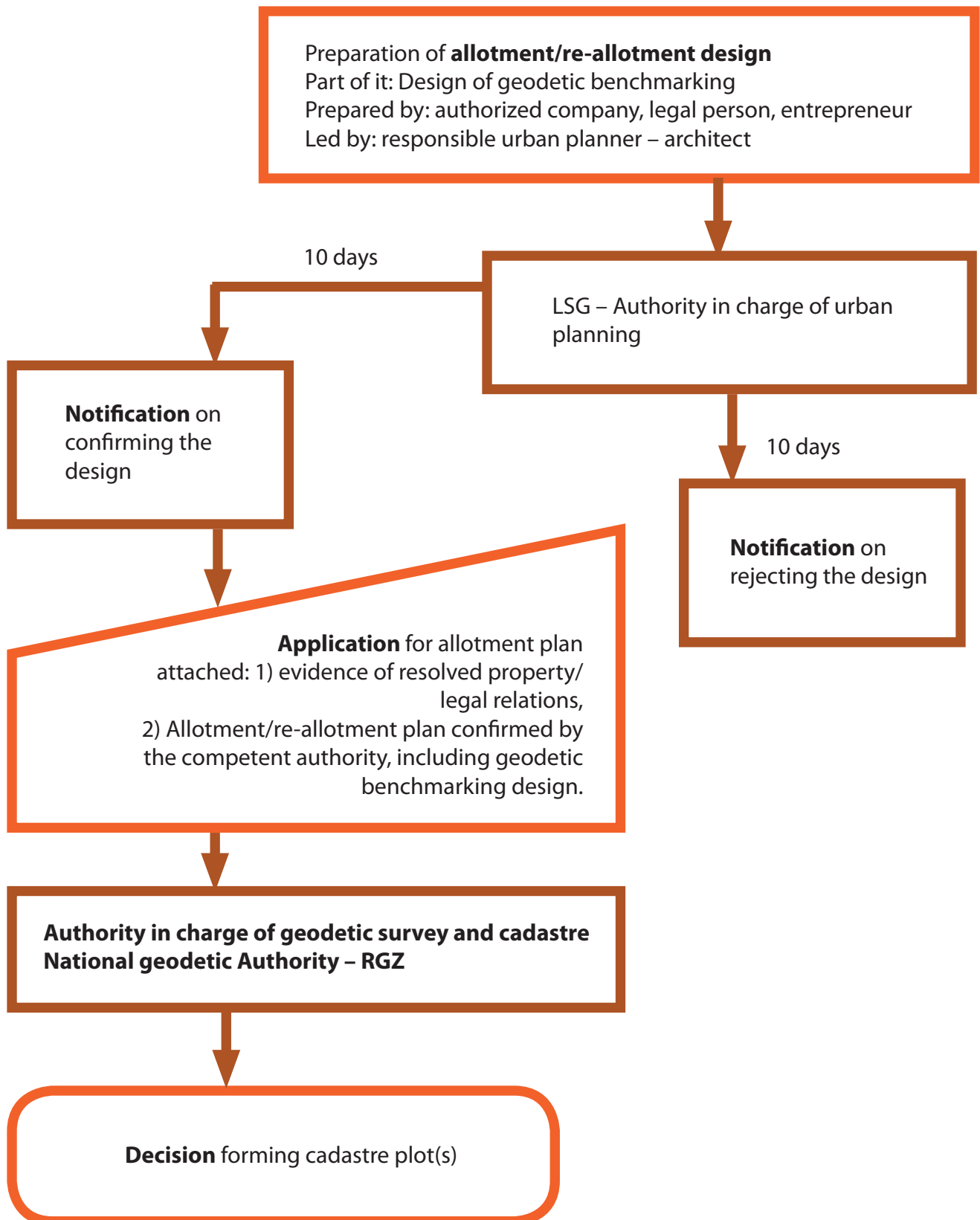


***NOTE:** Recommended for mote efficient construction

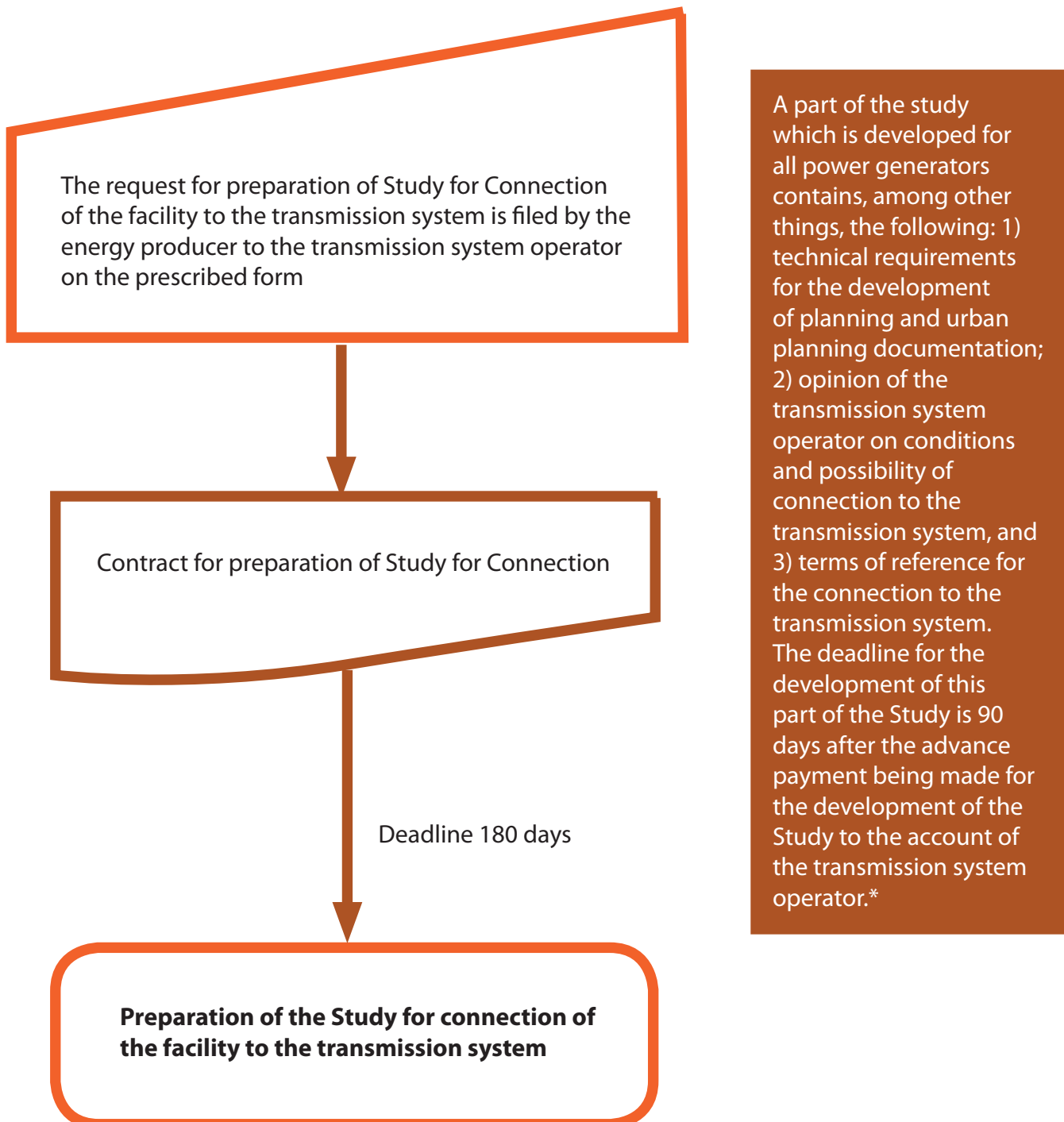
III-3 Forming the building plot



III-3 Allotment/re-allotment plan

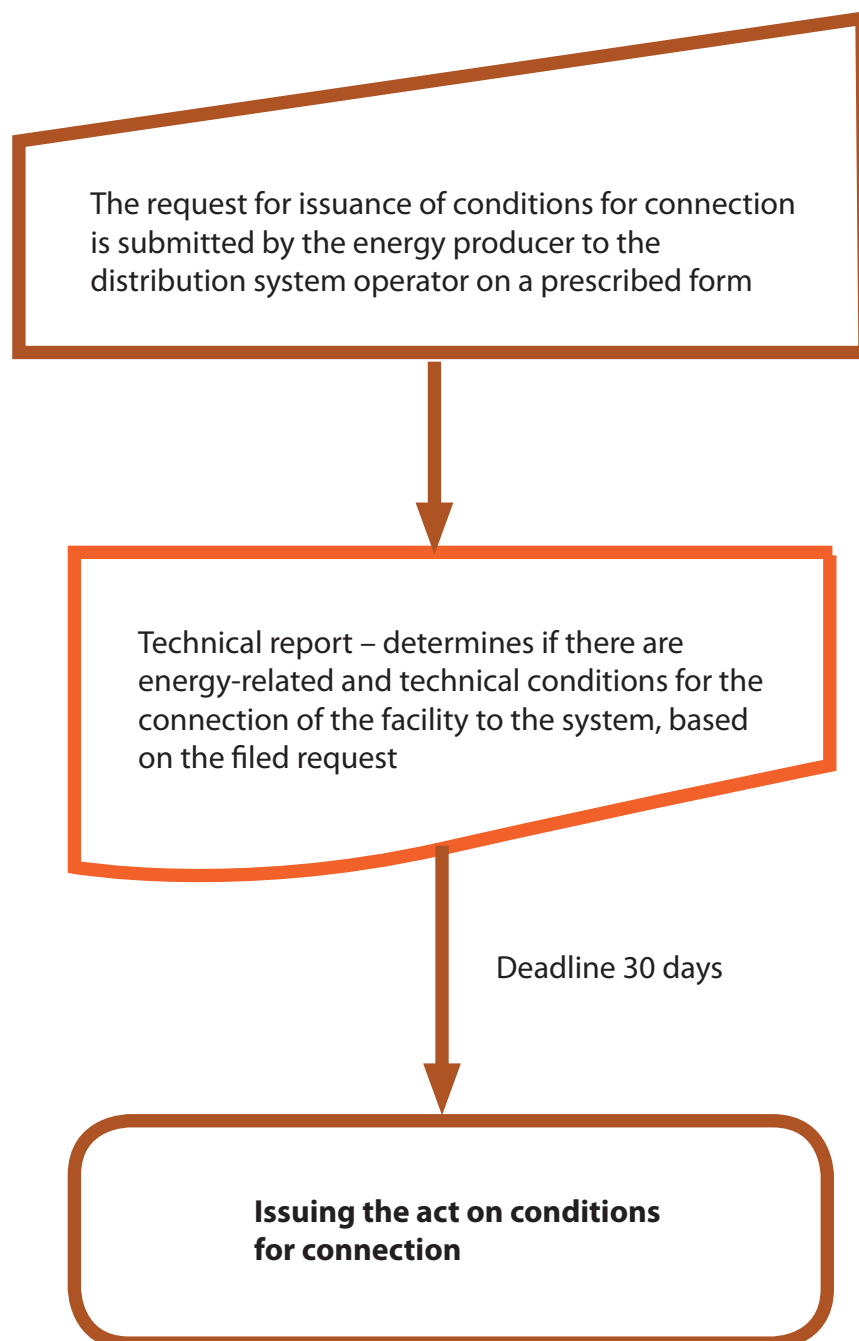


III-3 Conditions for connection to the transmission system

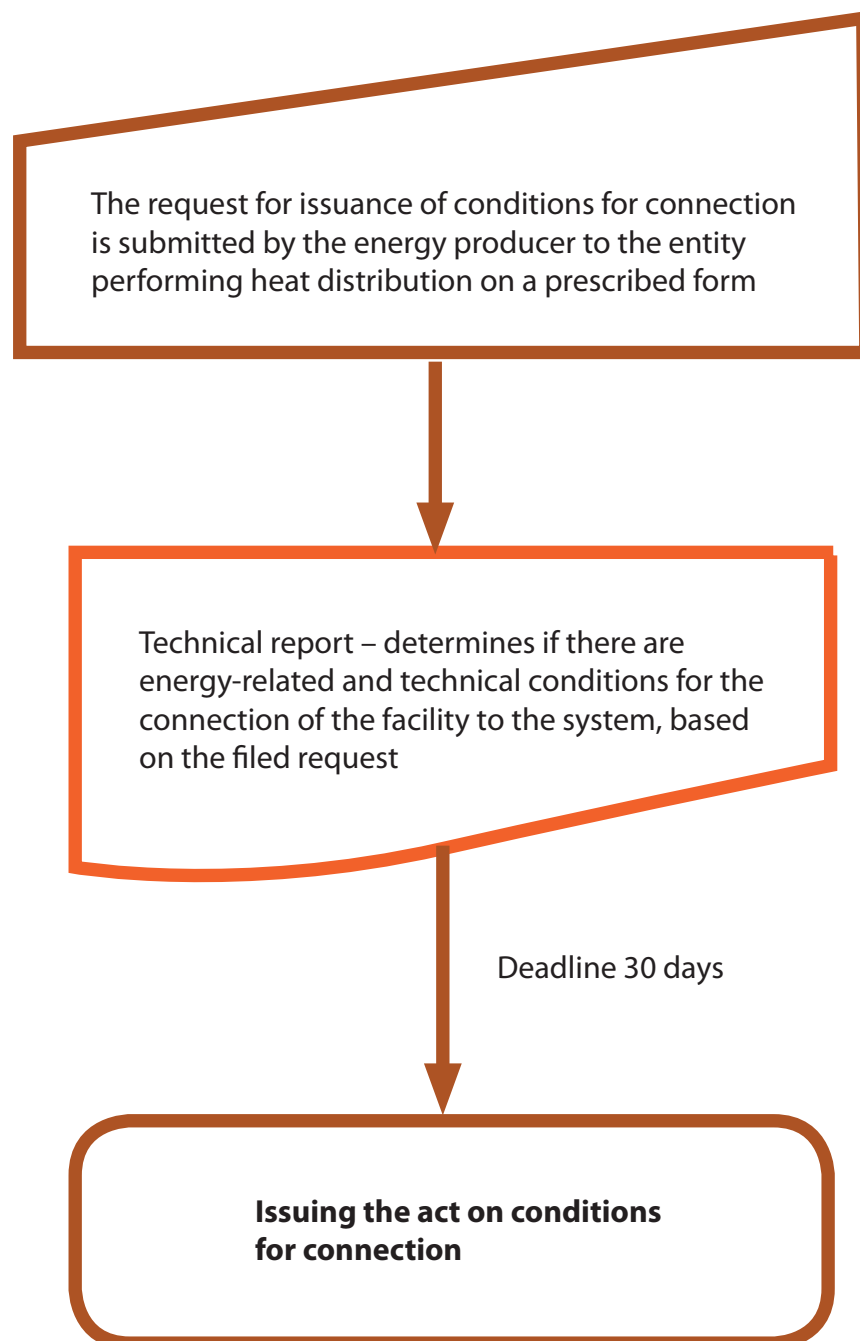


*Procedure for connection of facility to the transmission system, 23 December 2015

III-3 Conditions for connection to the distribution system



III-3 Conditions for connection to the district heating system

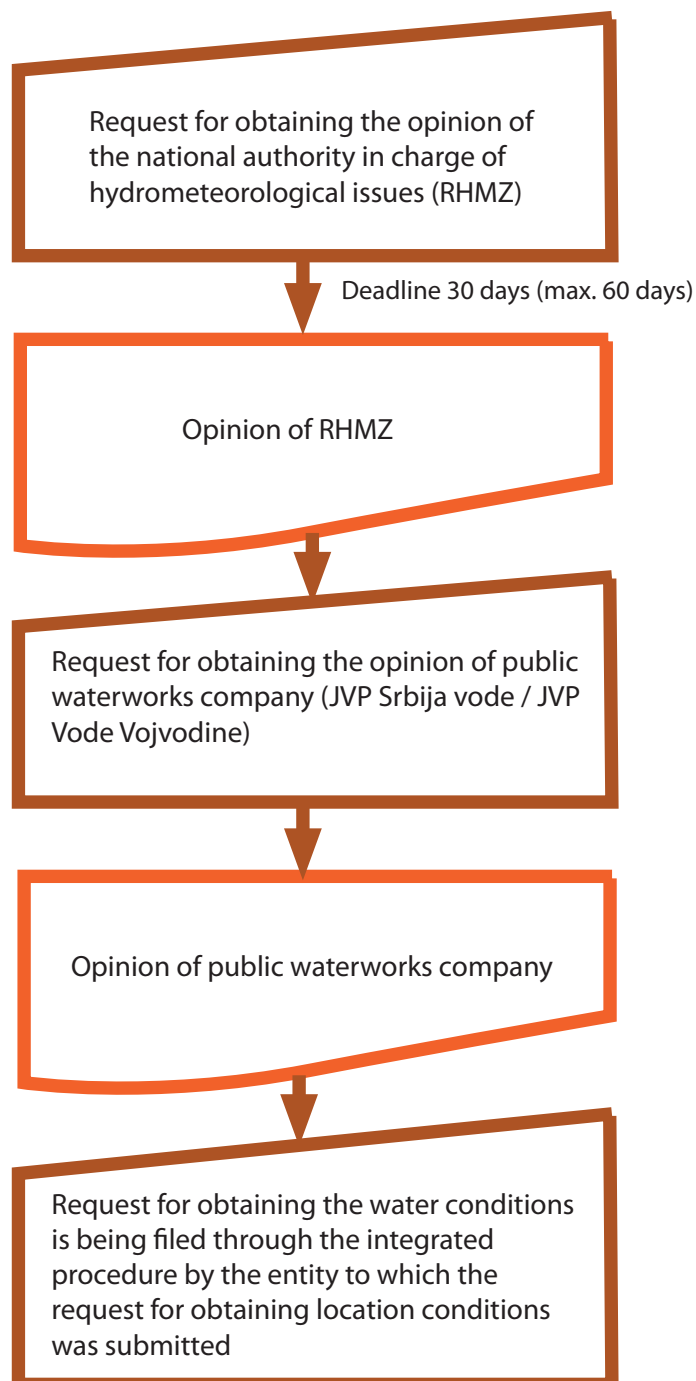


III-3 Water management acts *

Integrated procedure

- **Water management acts**
 - Water requirements (I-3)
 - Water requirements not necessary in integrated procedure, since compliance with water requirements for the issuing of construction permit is checked by technical control (I-4)
 - Water permit – to be acquired if water requirements request it (I-5)

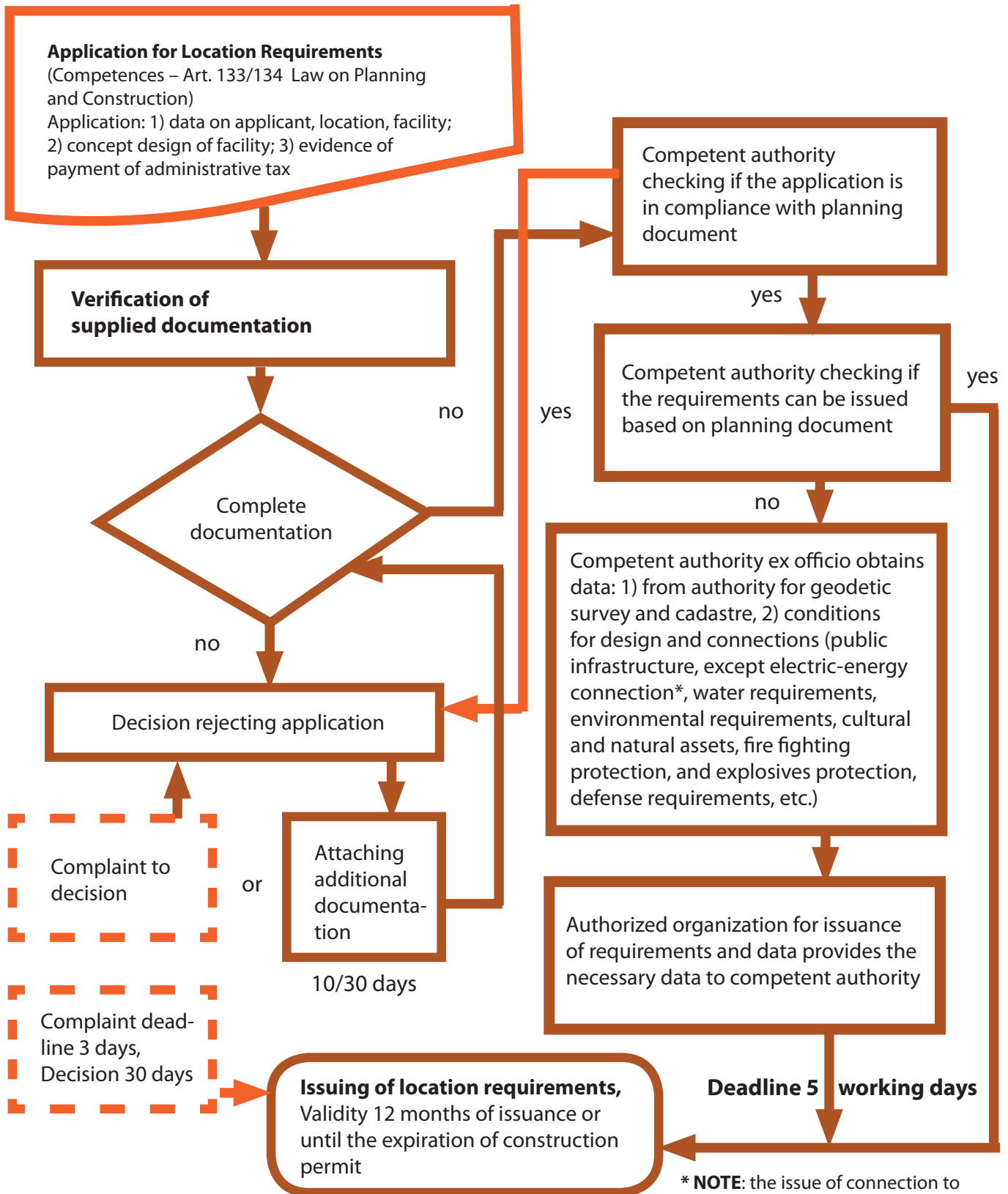
- **Competence**
 - Ministry in charge of water management
 - Competent authority of the autonomous province (for plants to be constructed in the AP)
 - Competent authority of the City of Belgrade (for plants in its territory)



*NOTE: it is necessary if not obtained during the stage of obtaining the permit for exploitation of hydrogeothermal energy

III-3 Obtaining location requirements

Integrated procedure



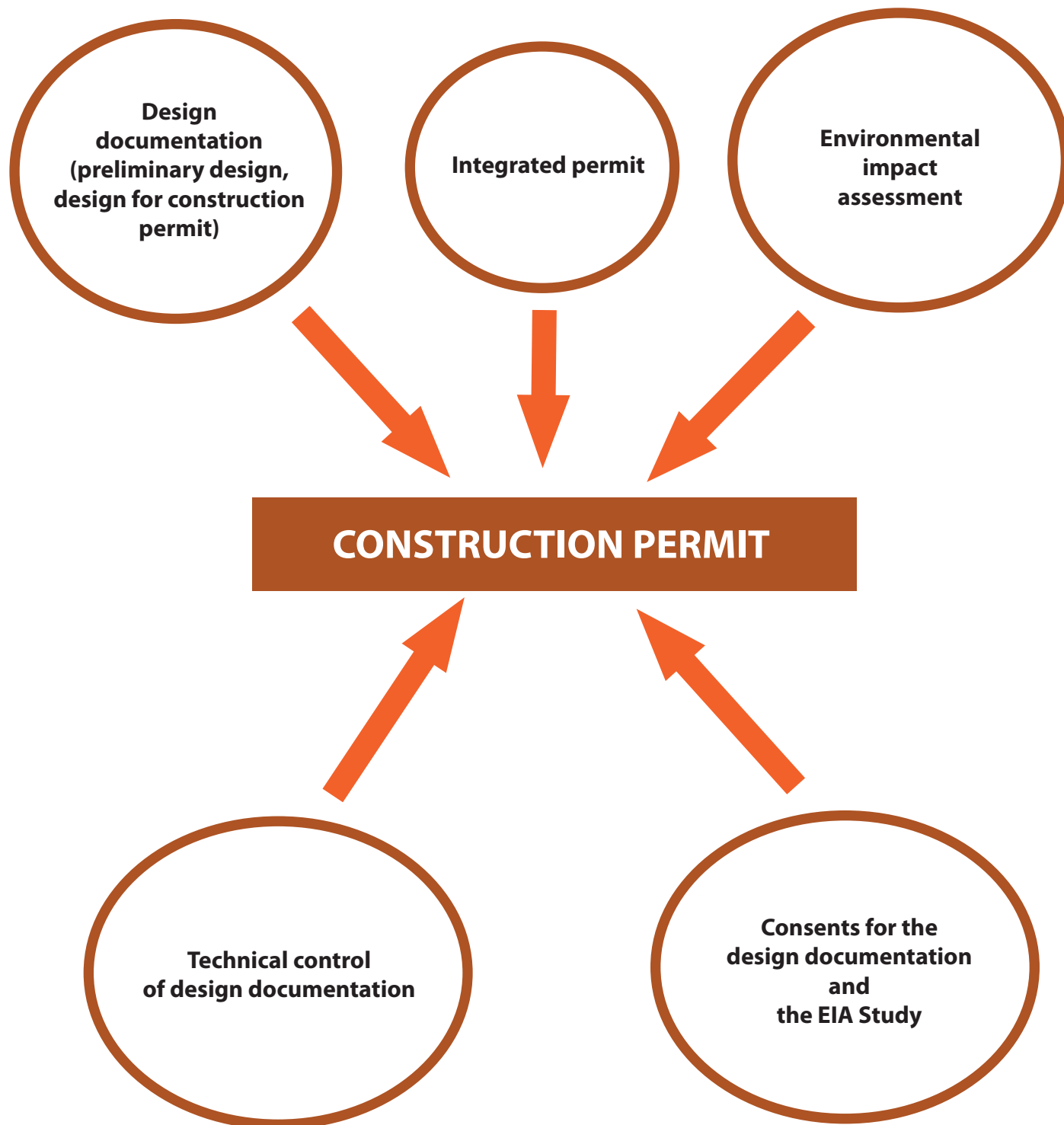
* **NOTE:** the issue of connection to the energy network in the capacity of buyer depends on the specific facility

III-4 Construction permit

- **After the completed technical control of the design for the construction permit and the positive report on performed technical control, the next step is filing the application for the construction permit to the ministry in charge of construction, or to the unit of local self-government*.**
- **It is a requirement for obtaining the status of preliminary privileged electricity producer**
- **After receiving it, it is possible to apply for approval for connection to the energy grid.**

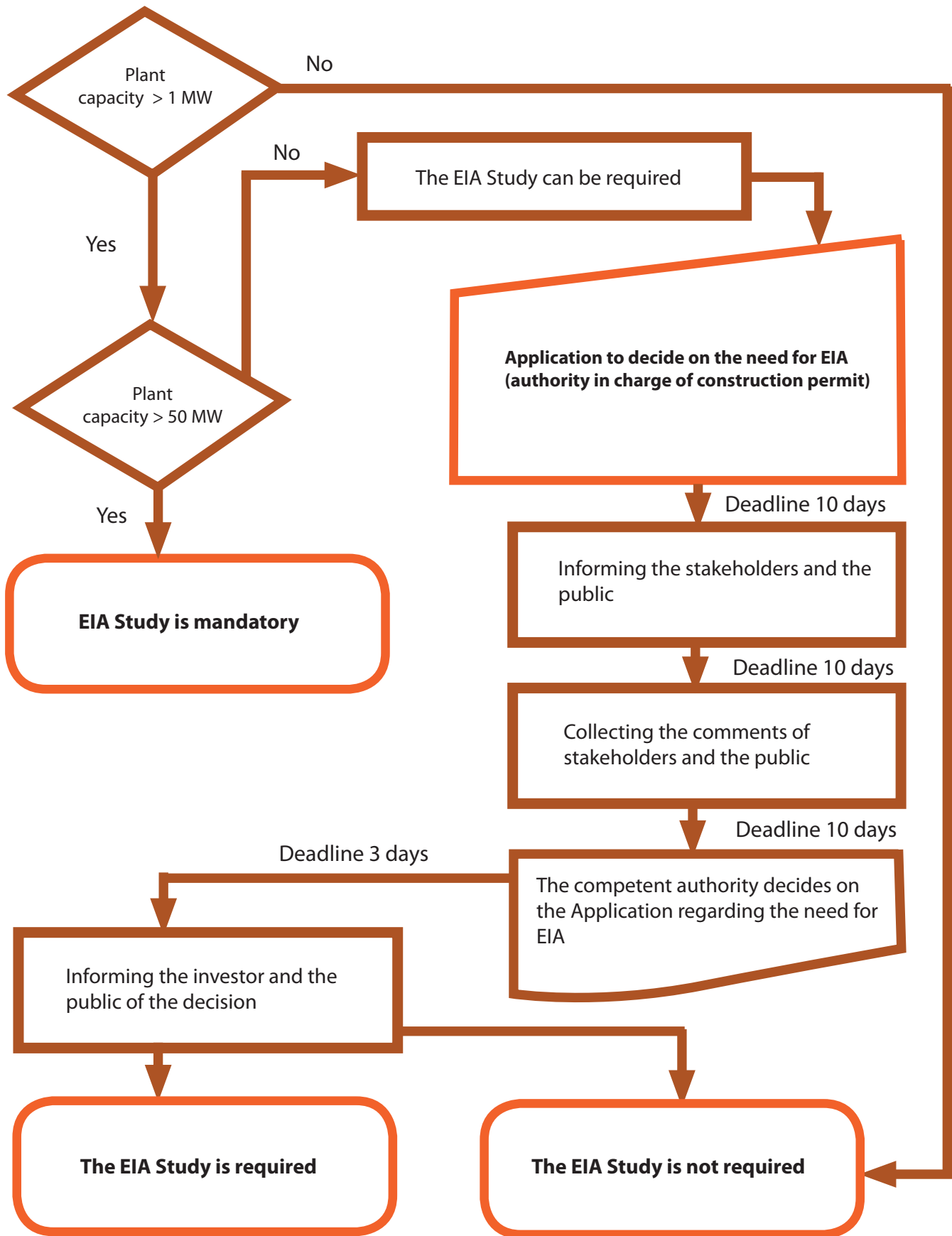
***NOTE:** More detail on competences in the slide on classification of plants with respect to the Law on Planning and Construction

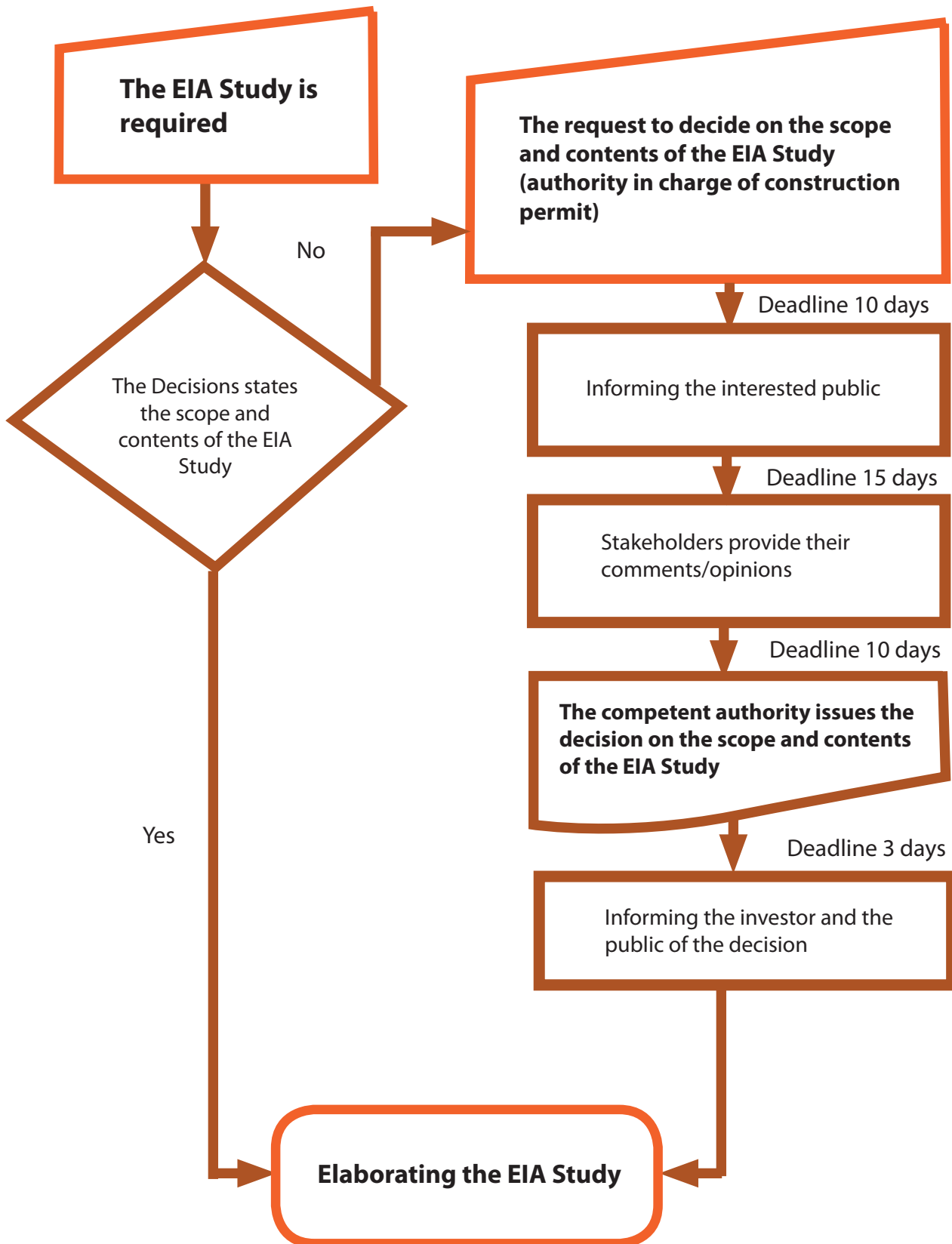
A pre-requisite for obtaining the status of preliminary privileged electricity producer

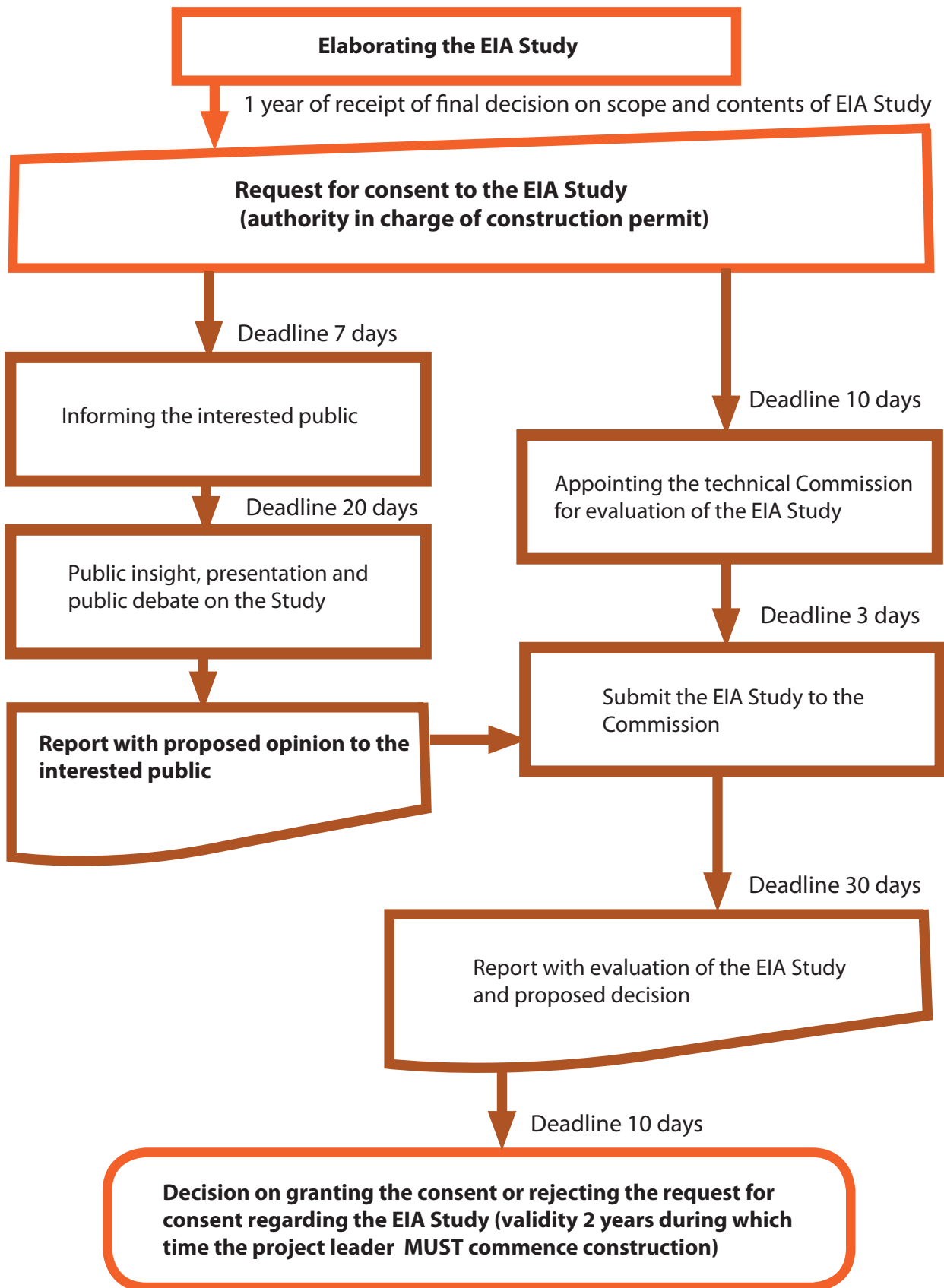


***NOTE:** when this permit is obtained, it is possible to apply for permit for connection to the energy grid

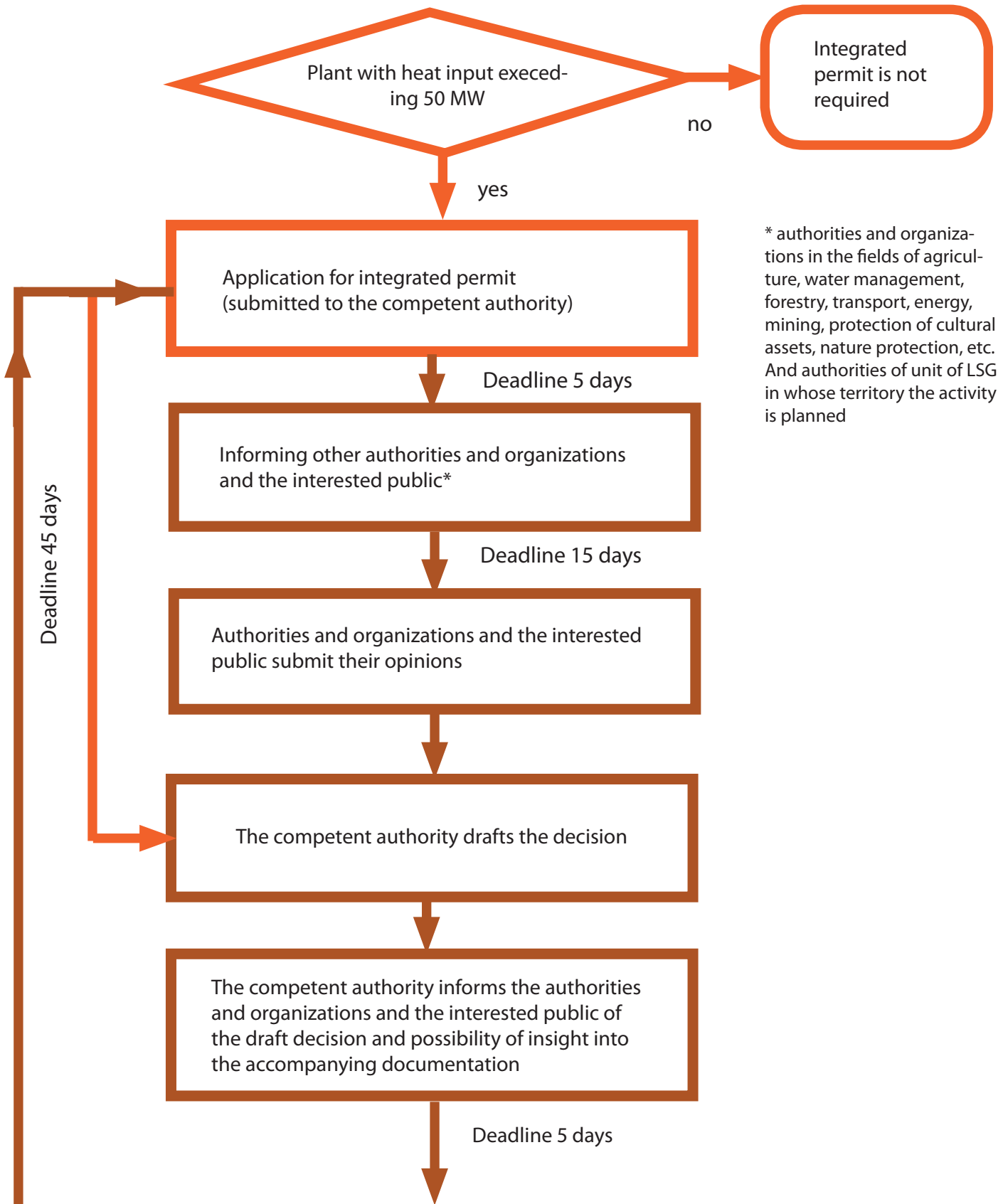
III-4 Environmental Impact Assessment



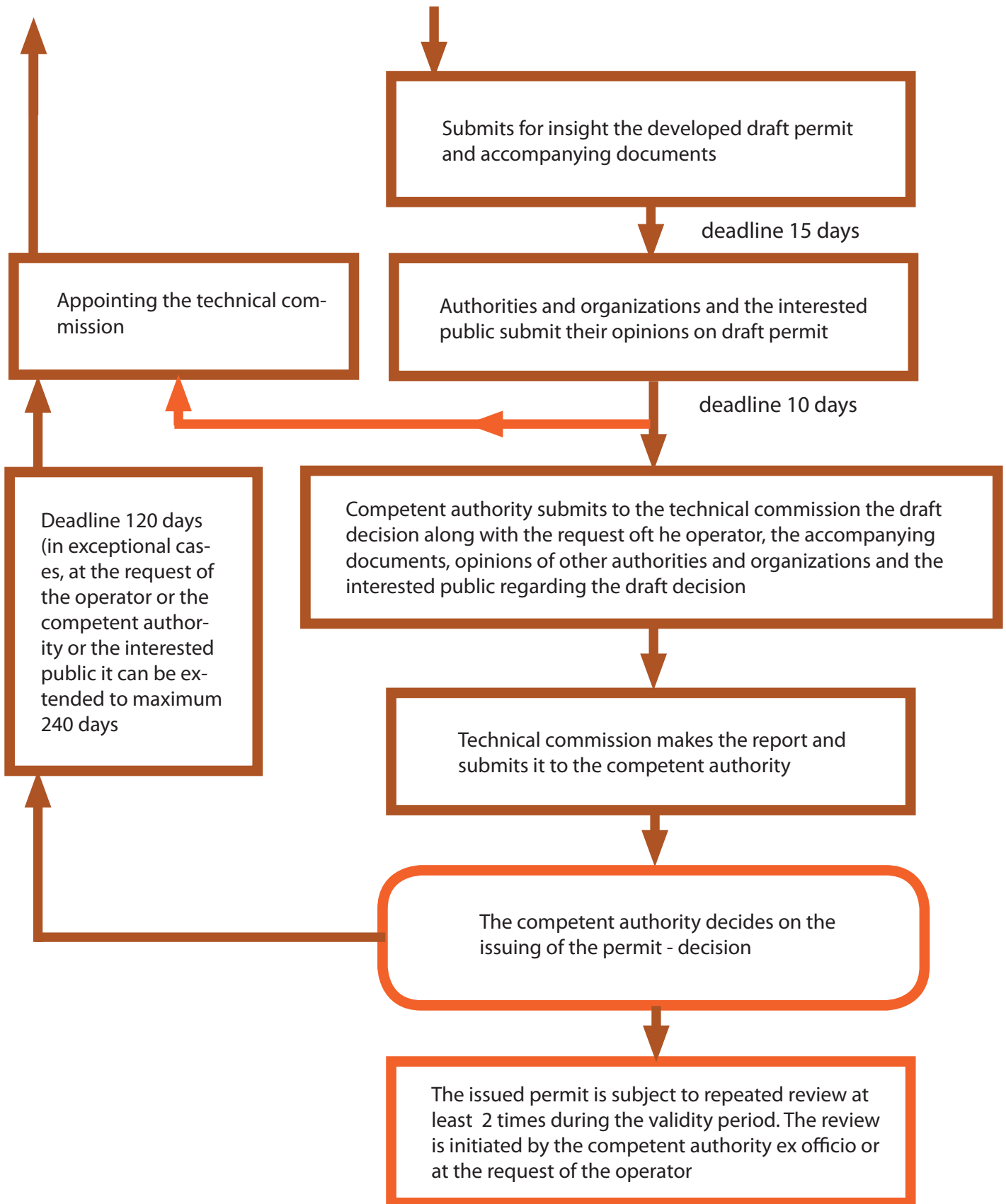




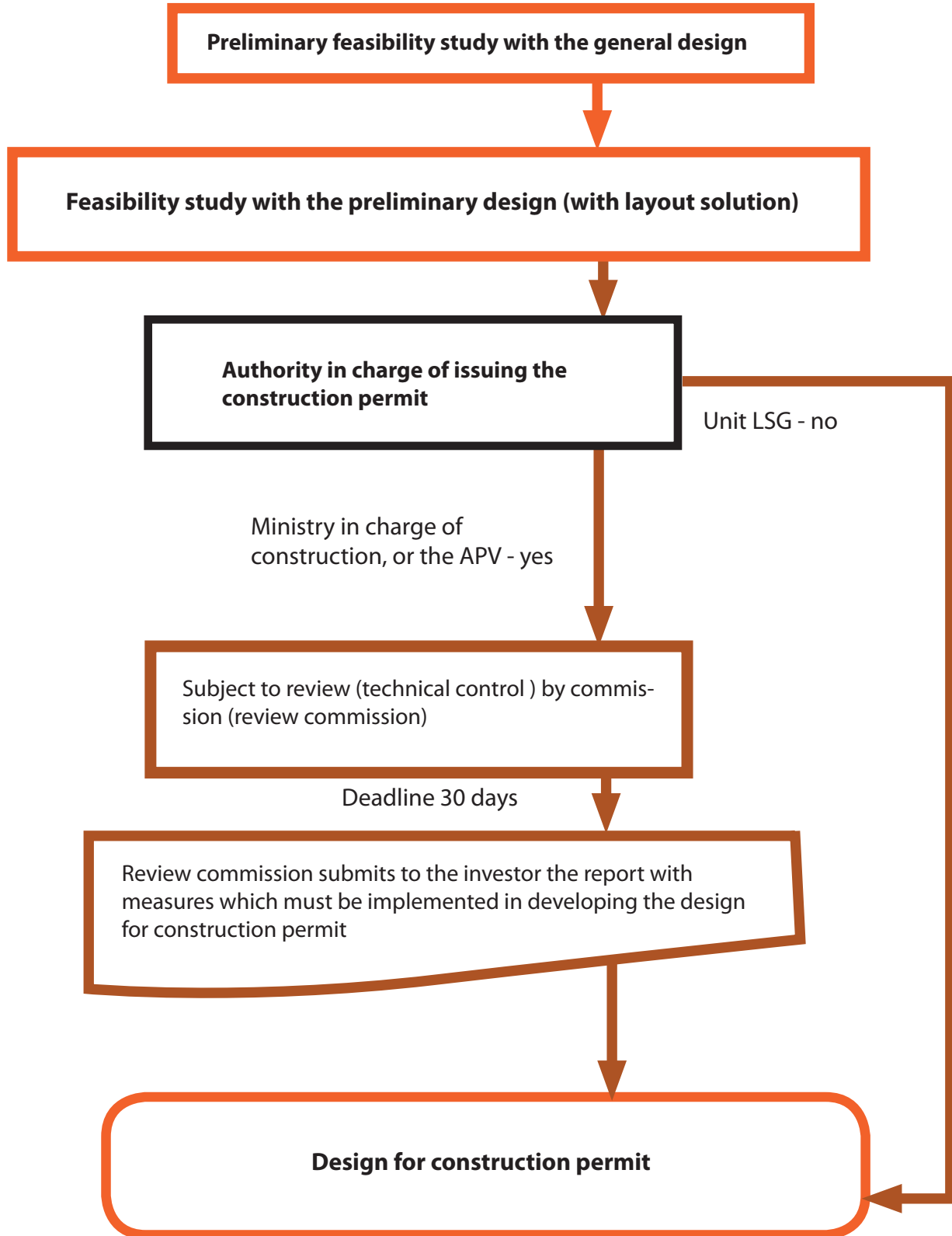
III-4 Integrated Permit



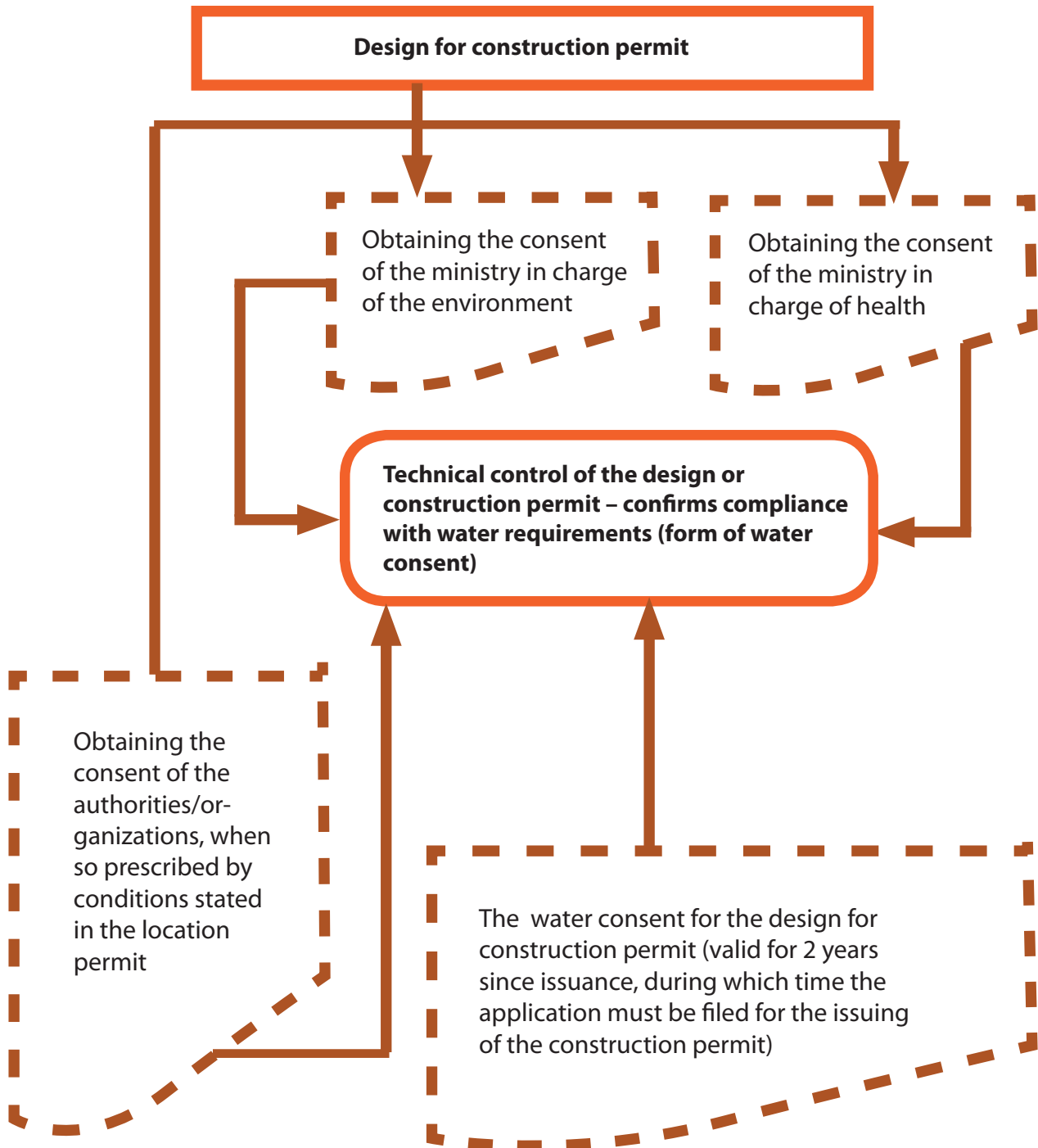
* authorities and organizations in the fields of agriculture, water management, forestry, transport, energy, mining, protection of cultural assets, nature protection, etc. And authorities of unit of LSG in whose territory the activity is planned



III-4 Technical documentation for the construction permit



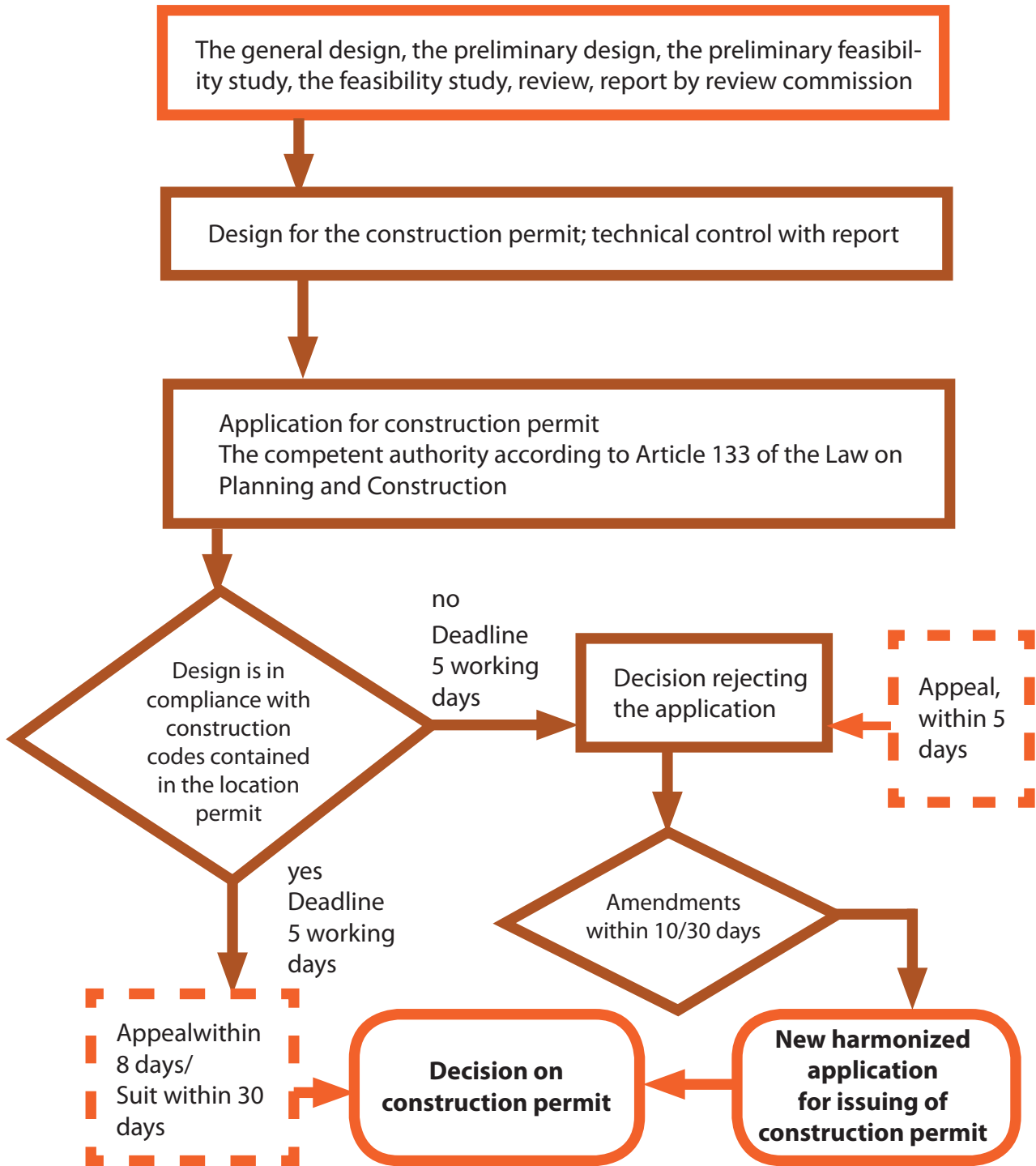
III-4 Technical control of design and water consent*



***Note:** the water consent is necessary if the structure affects the water regime, and the investor can obtain it also under the procedure prescribed in the Law on Water, in order to have a confirmation issued by the authority in charge of water regime

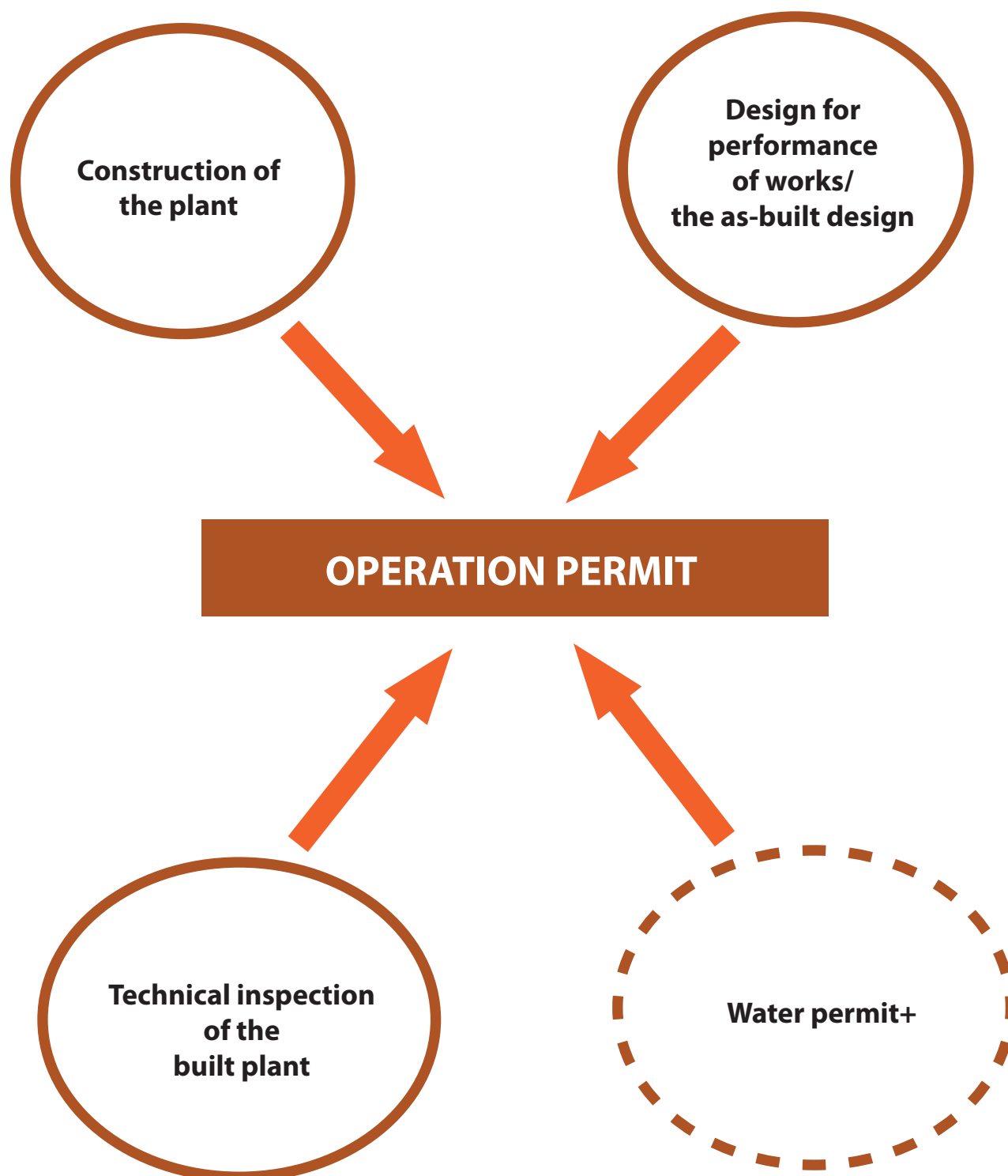
III-4 Obtaining the Construction Permit

Integrated procedure



III-5 Operation permit

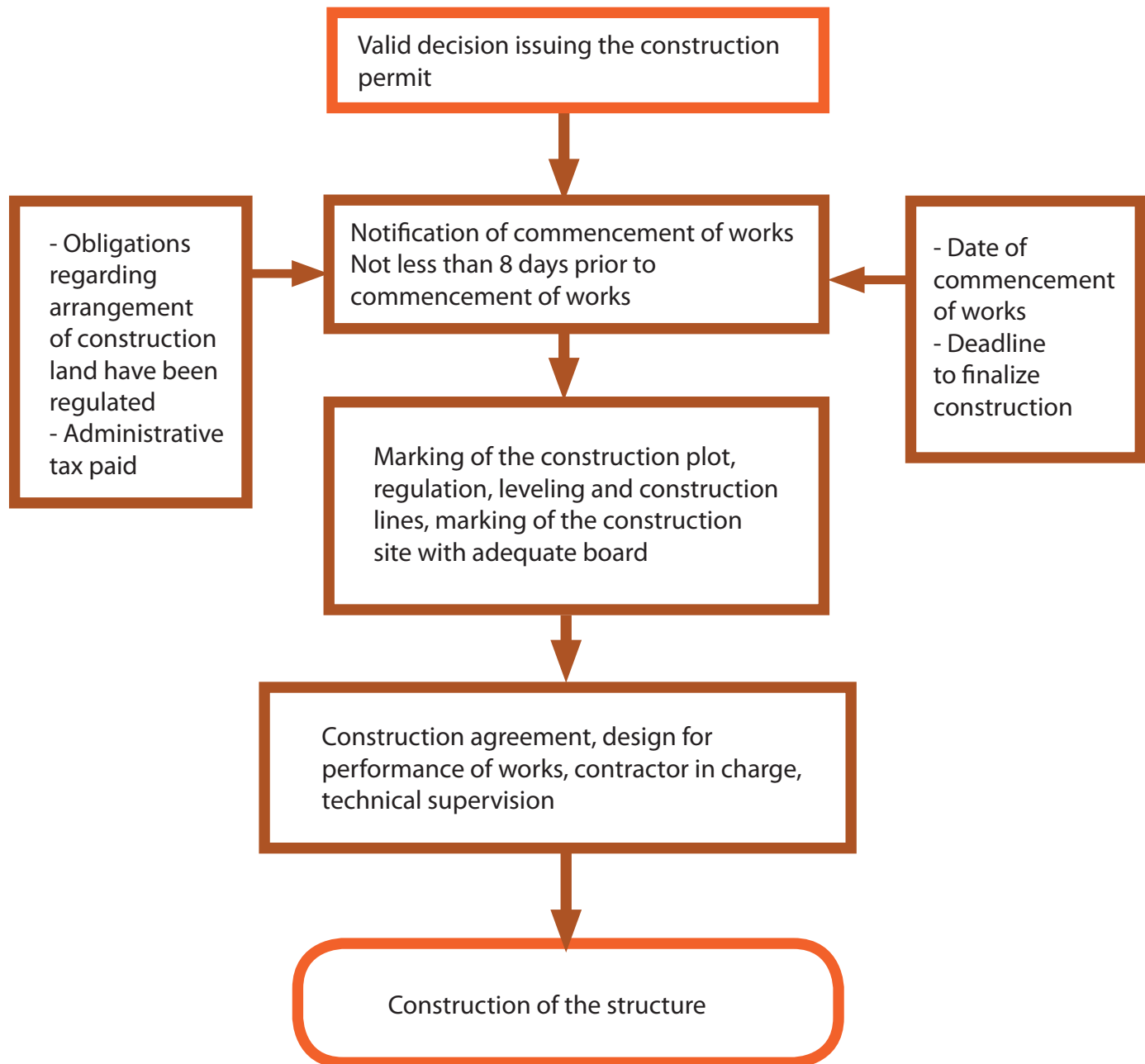
- **The fitness of the structure for operation is determined by technical inspection**
- **The structure can be utilized after the operation permit is obtained.**
- **In the process of obtaining the operation permit it is necessary to provide the design for performance of works / the as-built design.**



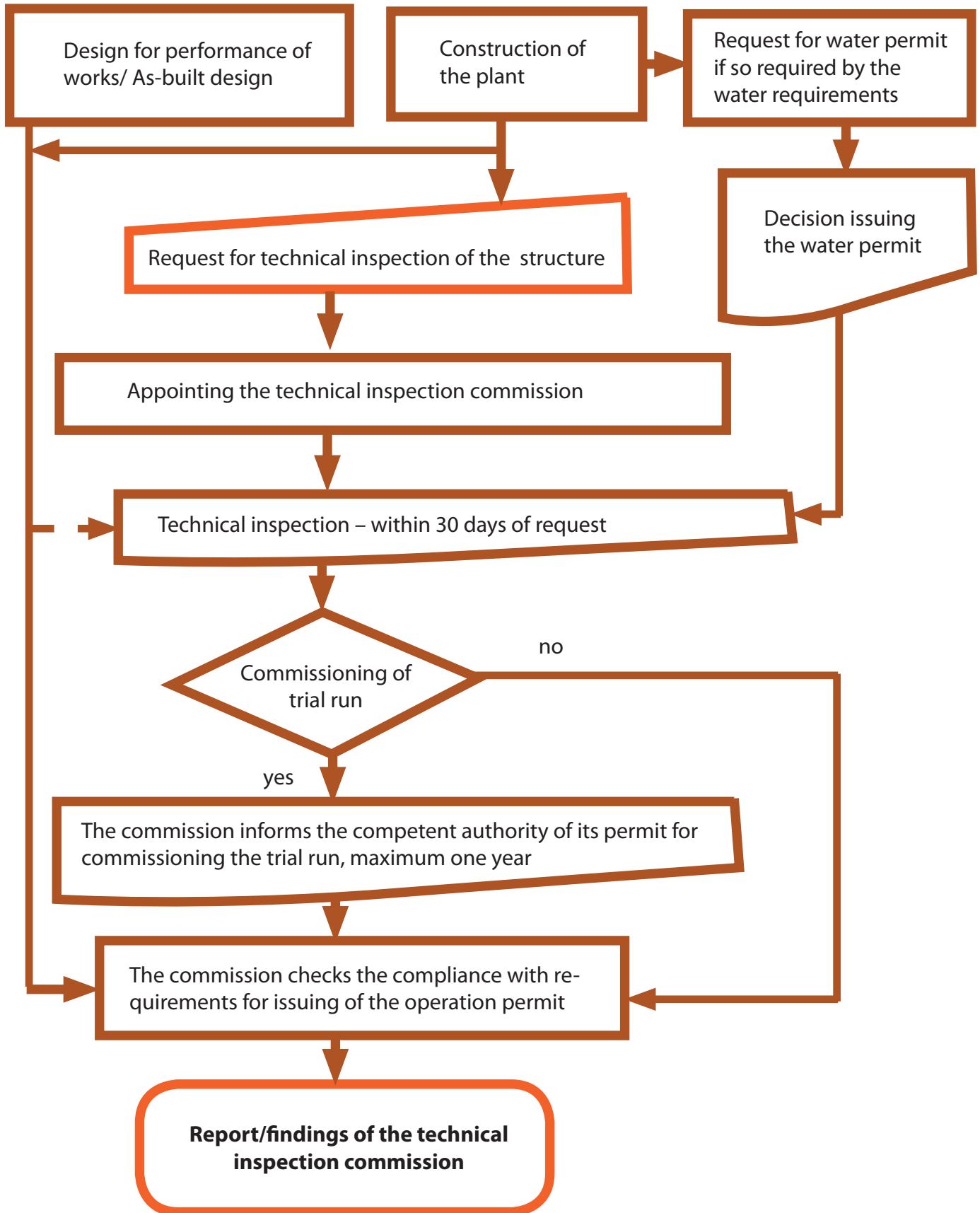
***Note:** It is desirable, but not mandatory, that the investor should, prior to obtaining the operation permit, to obtain the water permit, if it is necessary for the specific structure

III-5 Constructing the structure

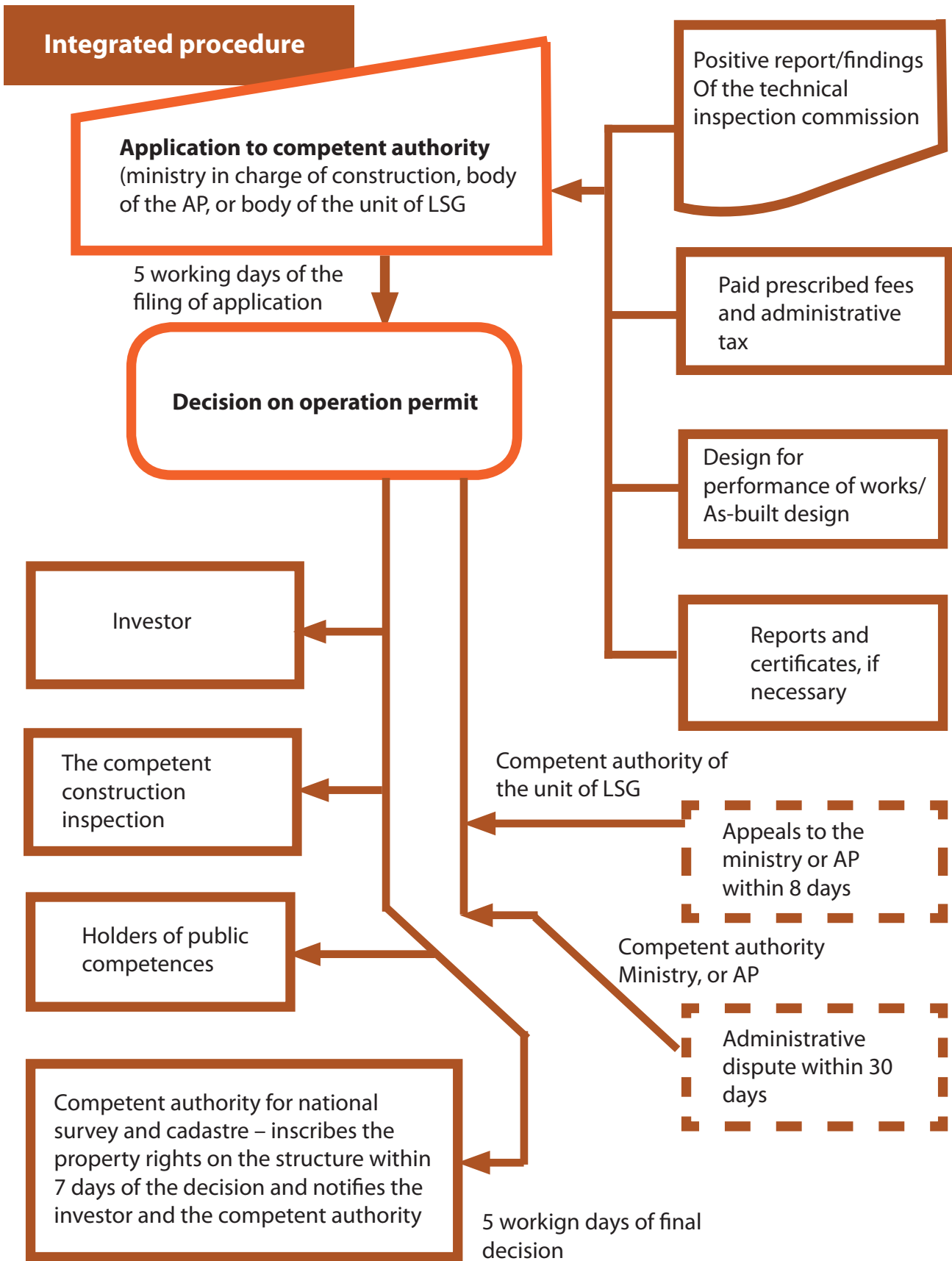
- **The construction of the structure, or the performance of works, can be performed by a company inscribed in the relevant registry of construction companies (contractor).**
- **The obligations of the contractor are as follows: prior to commencement of works to sign the designs for the performance of works, to issue a decision appointing the contractor-in-charge at the construction site, 3) ensure for the contractor-in-charge the construction contract and the documentation based on which the structure is to be constructed, 4) ensure preventive measures for health and safety at work in compliance with the law, perform the works in compliance with the documentation based on which the construction permit is issued, organize the construction site in a manner ensuring access to the site, ensure the safety of the structure and persons in the site and its surroundings, ensure evidence of the quality of performed works, maintain the daily building records, the building log, and ensure the inspection records, ensure the structures and the environs in case of suspension of works.**
- **The contract on construction, the decision appointing the contractor in charge and the design for the performance of works shall at all times be available at the building site.**
- **The investor shall ensure technical supervision during the construction or performance of works for which the construction permit has been issued.**



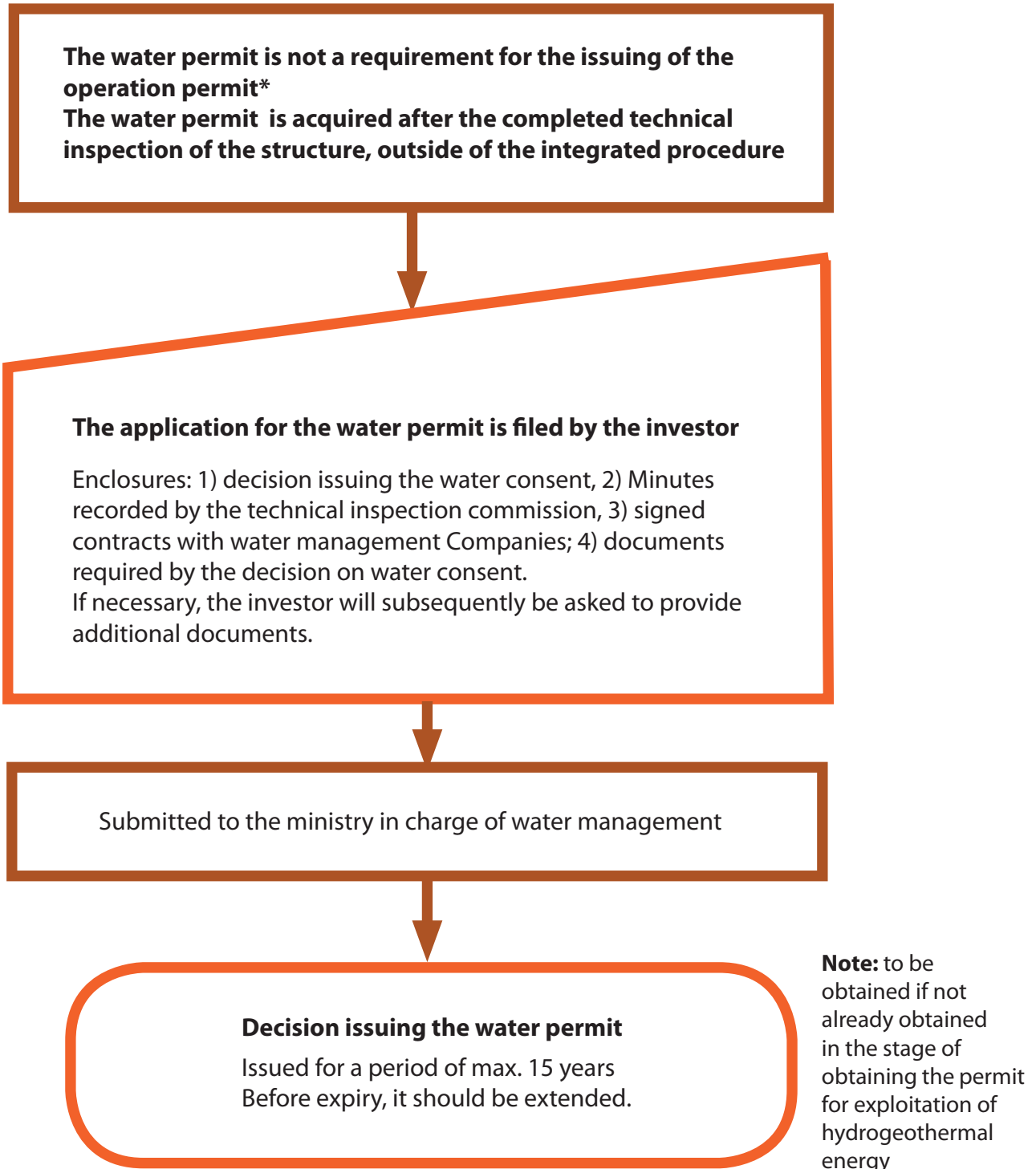
III-5 Technical inspection



III-5 Operation permit

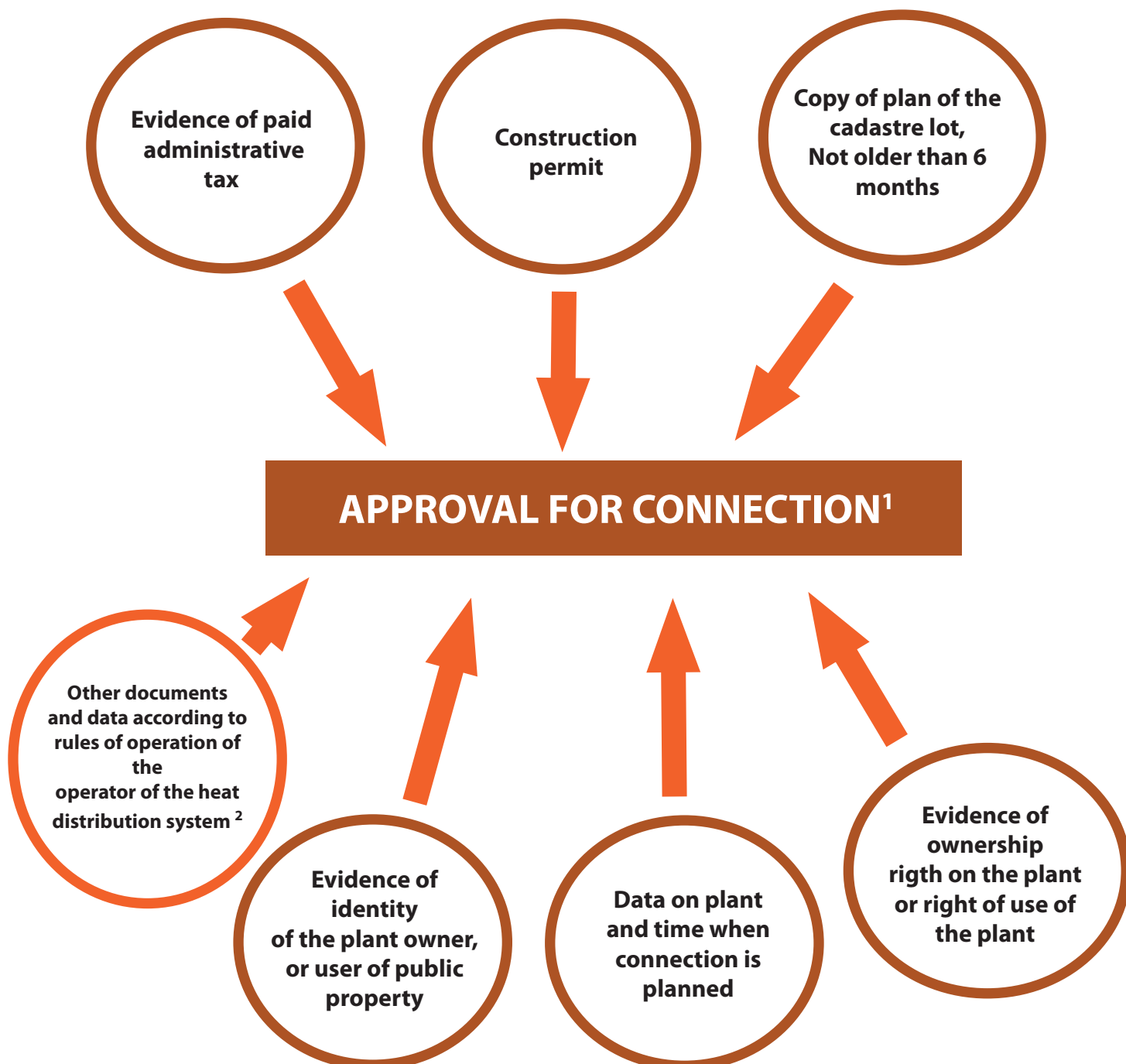


III-5 Acquiring the water permit - if required by water requirements -



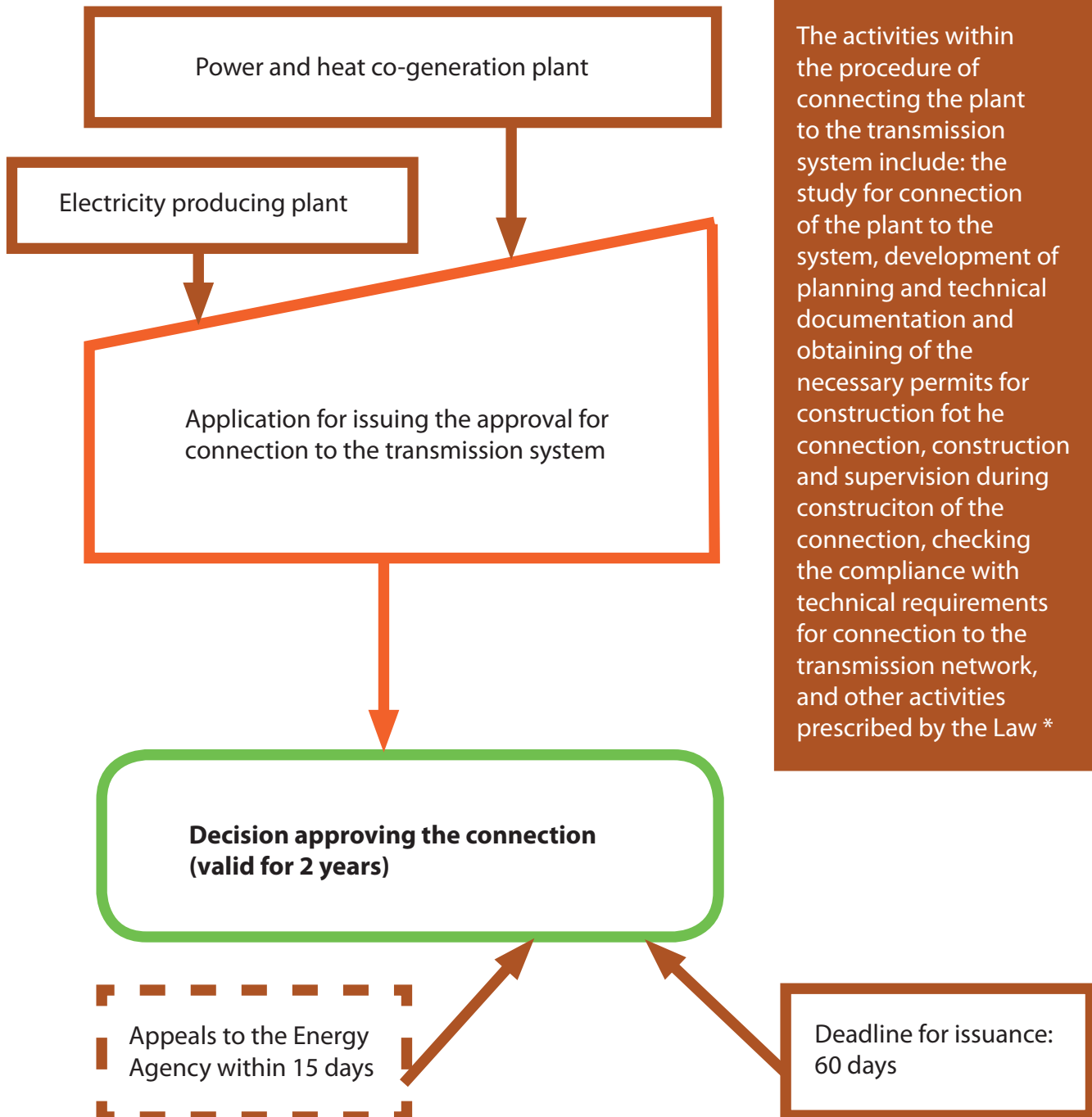
***Note:** in order to ensure legal certainty in plant operation, it is advisable to obtain the water permit before the commissioning of the plant.

IV Approval to connect the plant to the energy network

Pre-requisite for acquiring the status of privileged electricity producer**NOTE:**

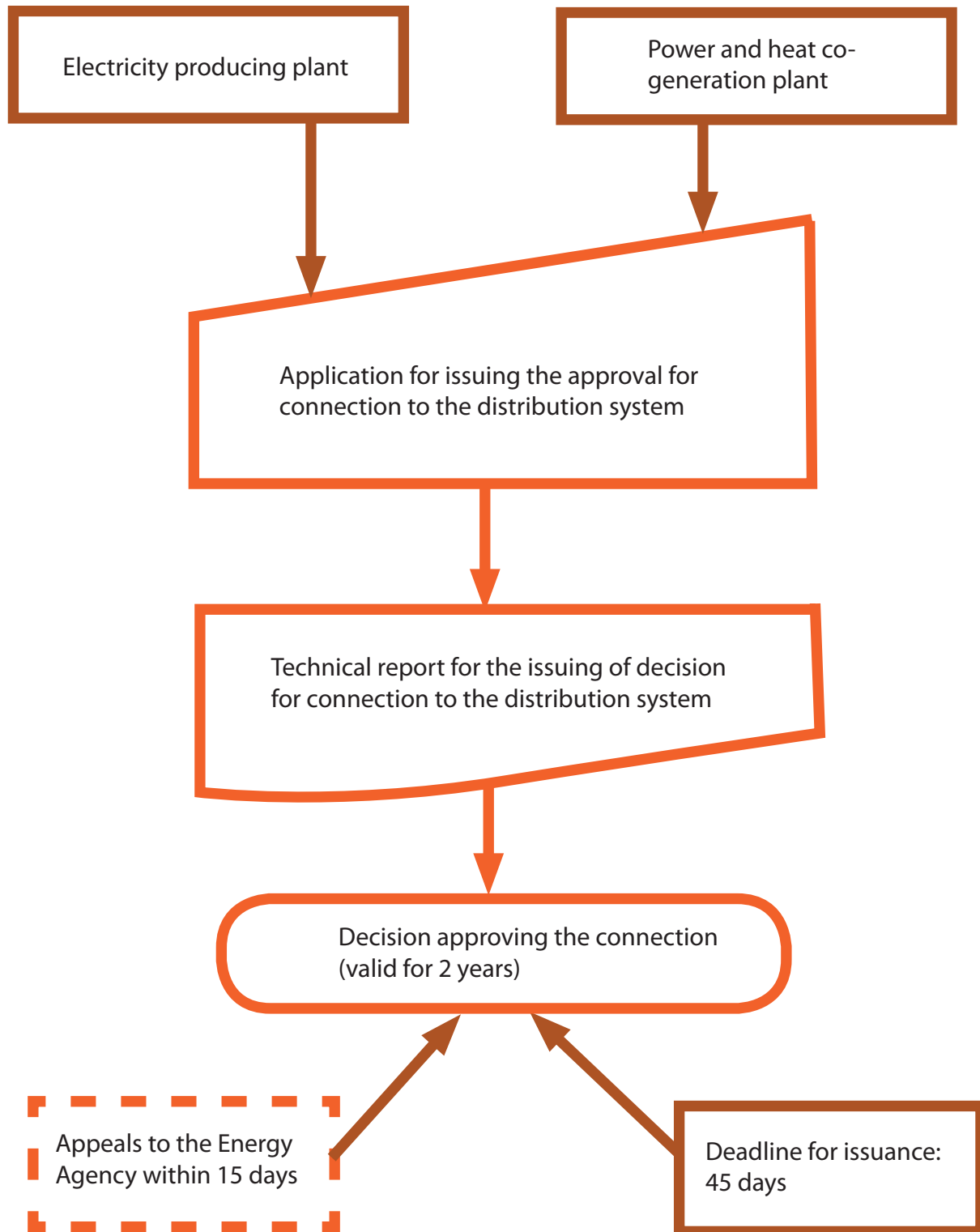
1. Note: the investor decides when to apply for this approval, starting from the moment of receiving the construction permit
2. Distributer of heat sets the rules regarding the operation of the distribution system with the consent of local government

IV-1a Approval for connection to the transmission system

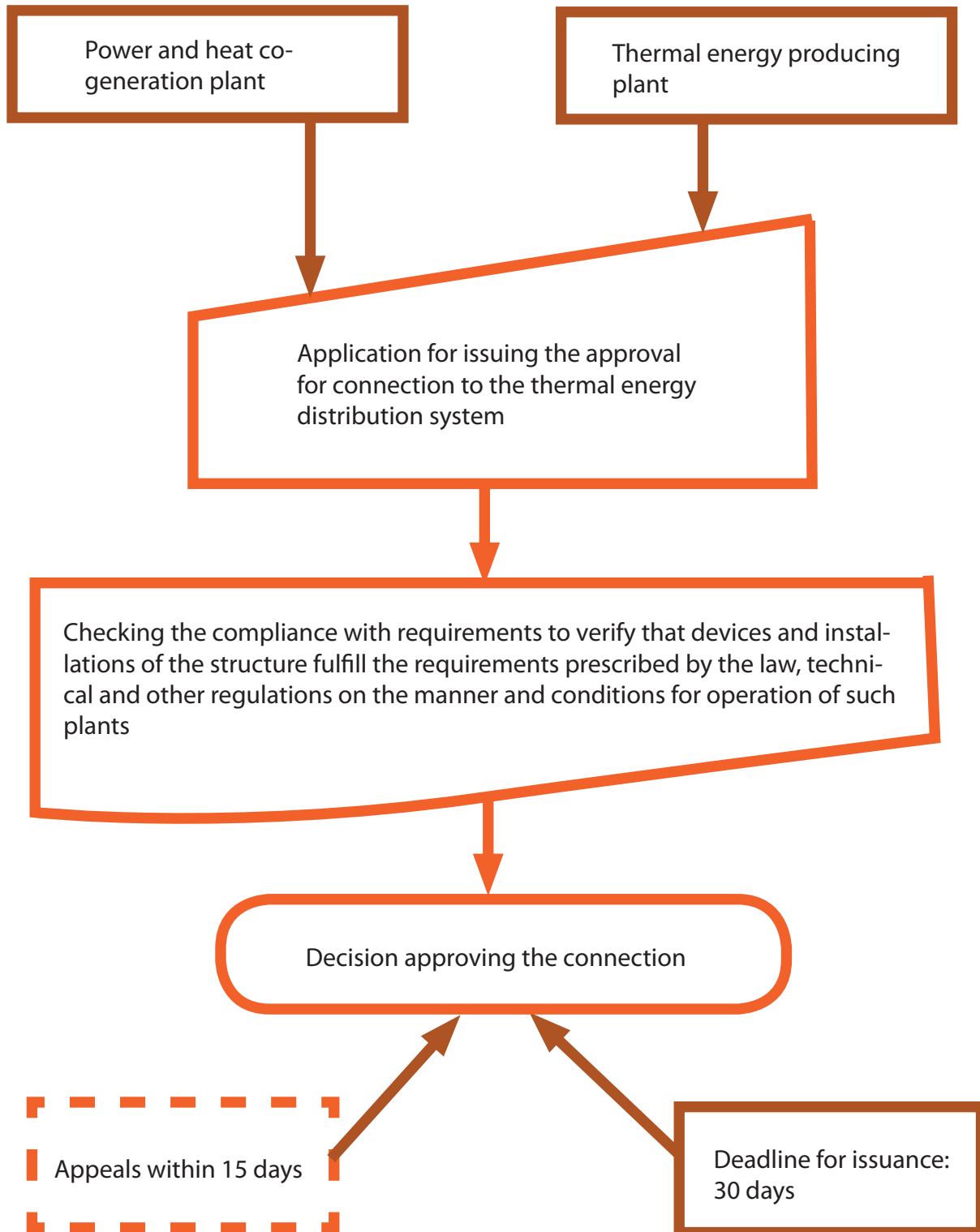


*Procedure for connection of structures to the transmission system, 23 December 2015.

IV-1b Approval for connection to the distribution system



IV-2 Approval for connection to the thermal energy distribution system



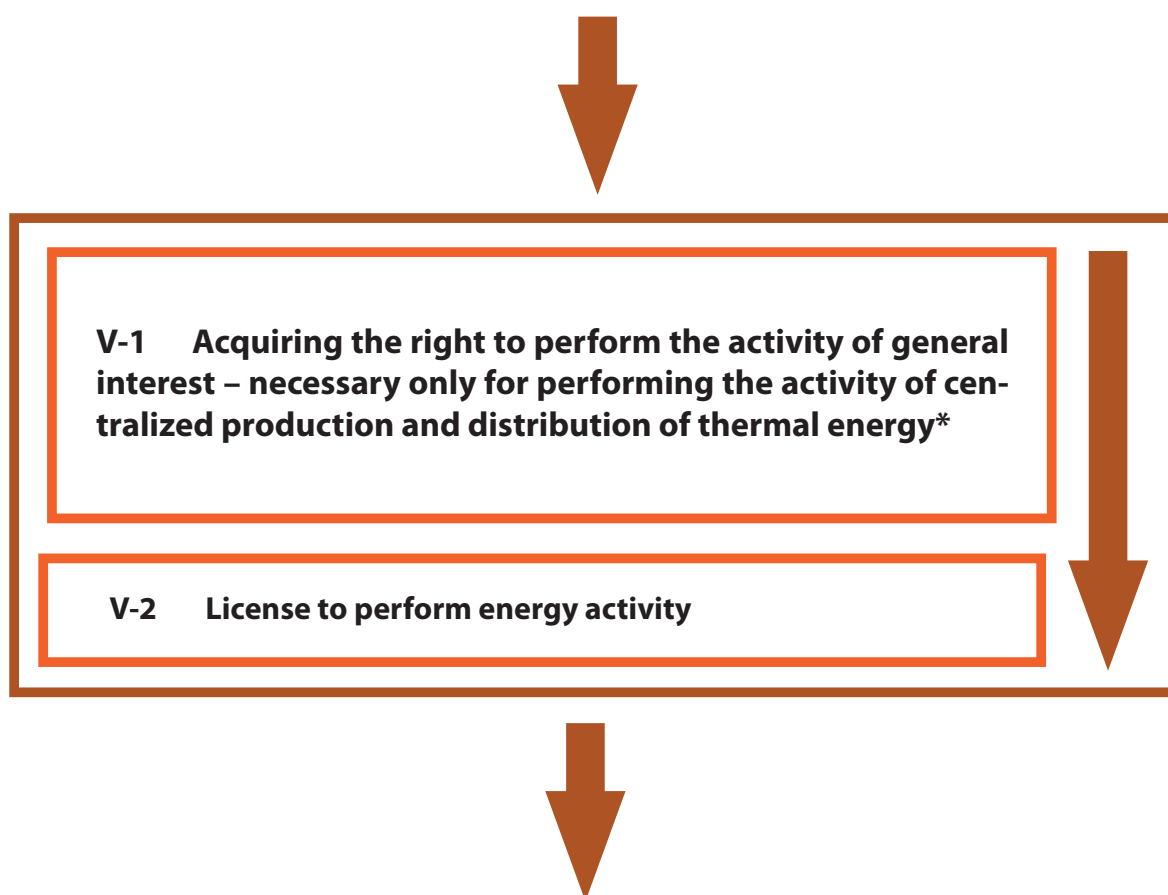
V Acquiring the right to perform the activity of production of electricity/thermal energy



- **Market activity**
 - Production of electricity
 - Electricity and thermal energy co-generation

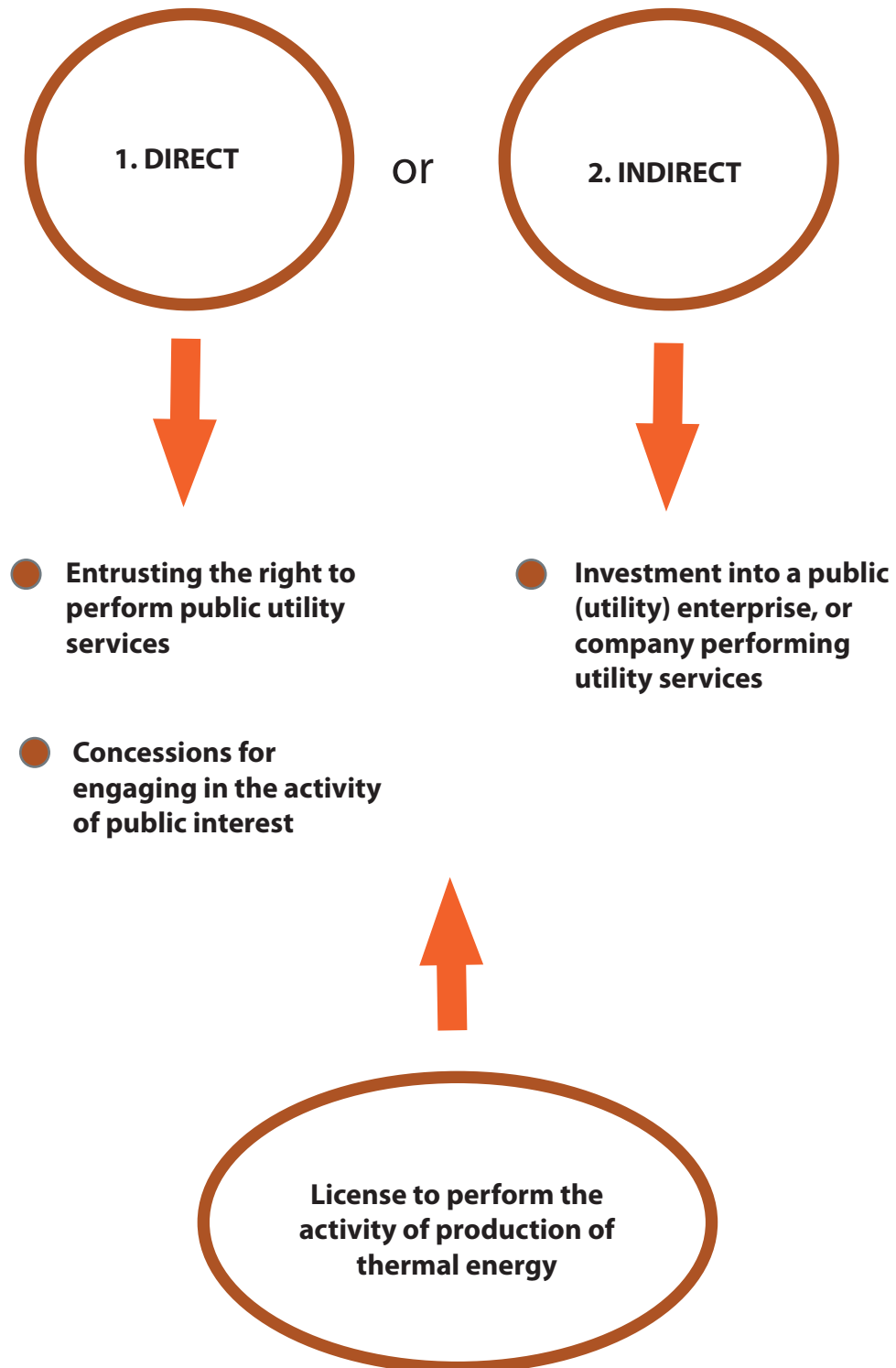
- **Activity of general interest**
 - Production and distribution of thermal energy
 - Centralized production and distribution in several facilities of steam and hot water for heating purposes

V Acquiring the right to perform the activity production of electricity and electricity and thermal energy co-generation



***Note:** it can be acquired on the basis of the Law on Utility Services and the Law on Public-Private Partnership

V-1 The right to perform the activity of production fo thermal energy - manner of acquiring the right -

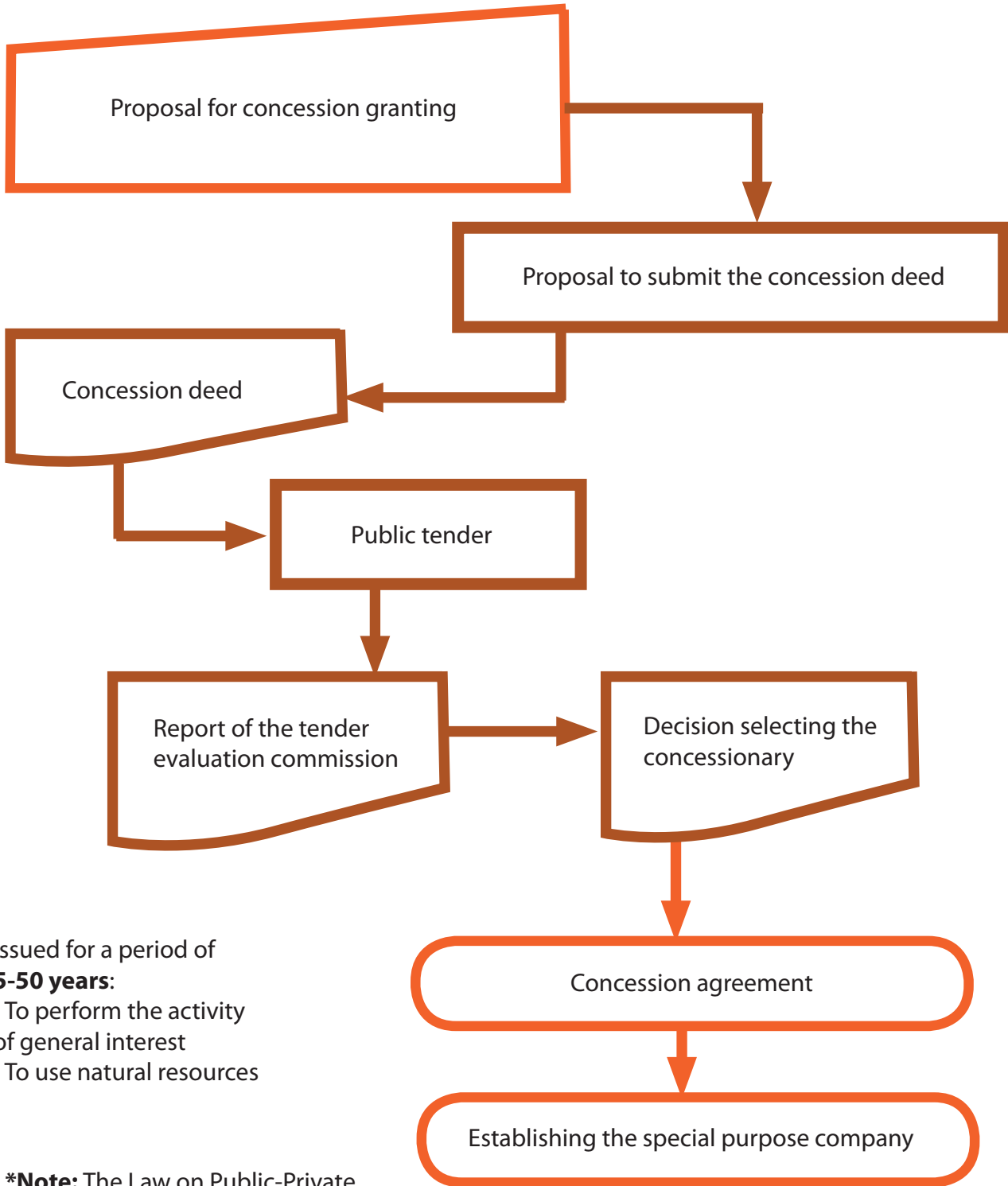


V-1 Entrusting the right to perform public utility activity*

- **Entrusting on the basis of:**
 - Decision of the assembly of the unit of local self-government on the manner of performing public utility services
 - Contract entrusting the public utility services
- **Financing the activity of utility services determines the procedure of how it is entrusted:**
 - The contractor obtains the right to ensure financing of utility services in whole or in part by collecting fees from service users, regulated by the law on concessions
 - The performance of utility services is funded from the budget of the unit of local self-government, pursuant to provisions of the law regulating public procurements

***Note:** The Law on Public Utility Services

V-1 Concession*



Issued for a period of **5-50 years:**

- To perform the activity of general interest
- To use natural resources

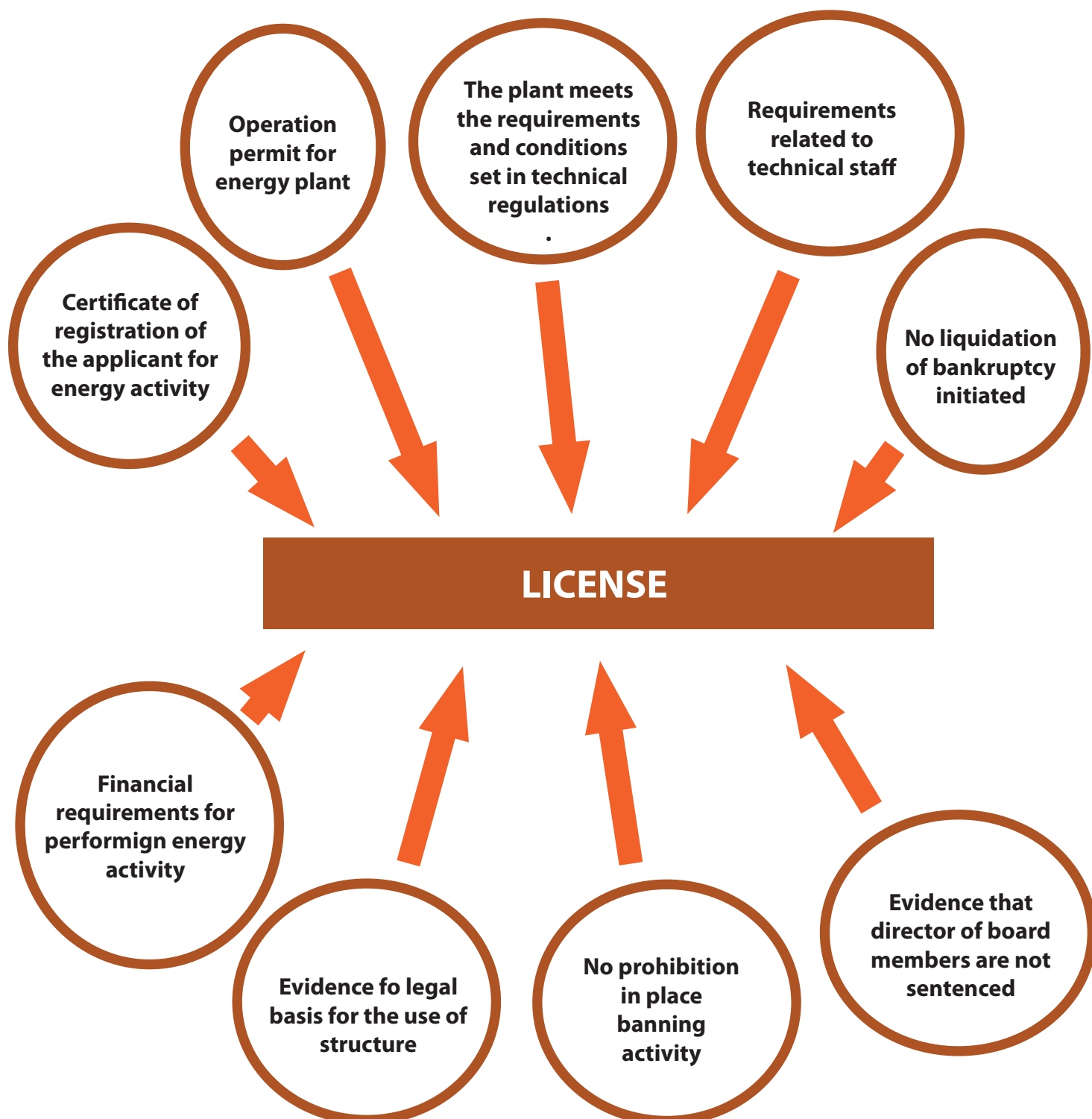
***Note:** The Law on Public-Private Partnership

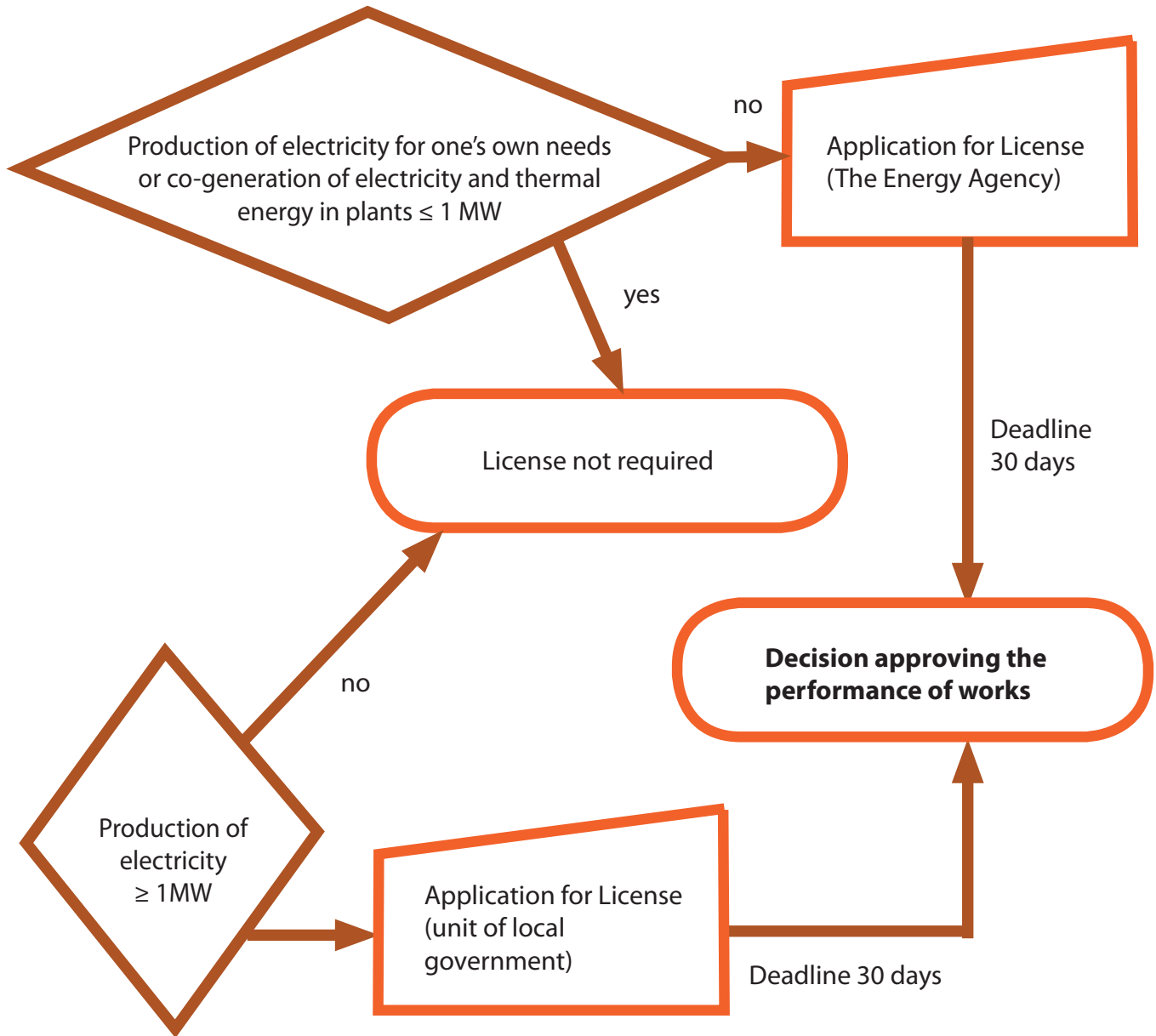
V-1 Concession – contents of the concession agreement

- **Parties to the agreement, the scope of the concession, including description of structures, facilities, plants**
- **Duration of the concession and conditions on how this duration can be extended, duration of preparatory actions**
- **Distribution of risks between the private and public partner and the scope of exclusive rights of the private partner**
- **The amount of and the manner of ensuring guarantees for execution of obligations under the concession**
- **The conditions for performance of the concession activity and standards of products and services, technology transfer**
- **Concession fees (amount, deadlines, conditions and method of payment)**
- **Rights and obligations regarding the undertaking of measures for ensuring general safety, public health and environmental protection, as well as liability for compensation for damages caused by violating public safety and the environment**
- **The right to transfer the concession**
- **Time and manner of handing over the immovable property, structures, facilities and plants and the state in which they are to be handed over**
- **Condition for amendments or termination of agreement and their consequences, changed circumstances, or force majeure**
- **Resolution of disputes and applicable law**
- **Notification on execution of agreement, manner of exercising control and rights and obligations of parties to the agreement**
- **Other provisions mutually agreed between parties to the agreement**

V-2 License - to perform electricity producing activity -

Pre-requisite for status of privileged electricity producer

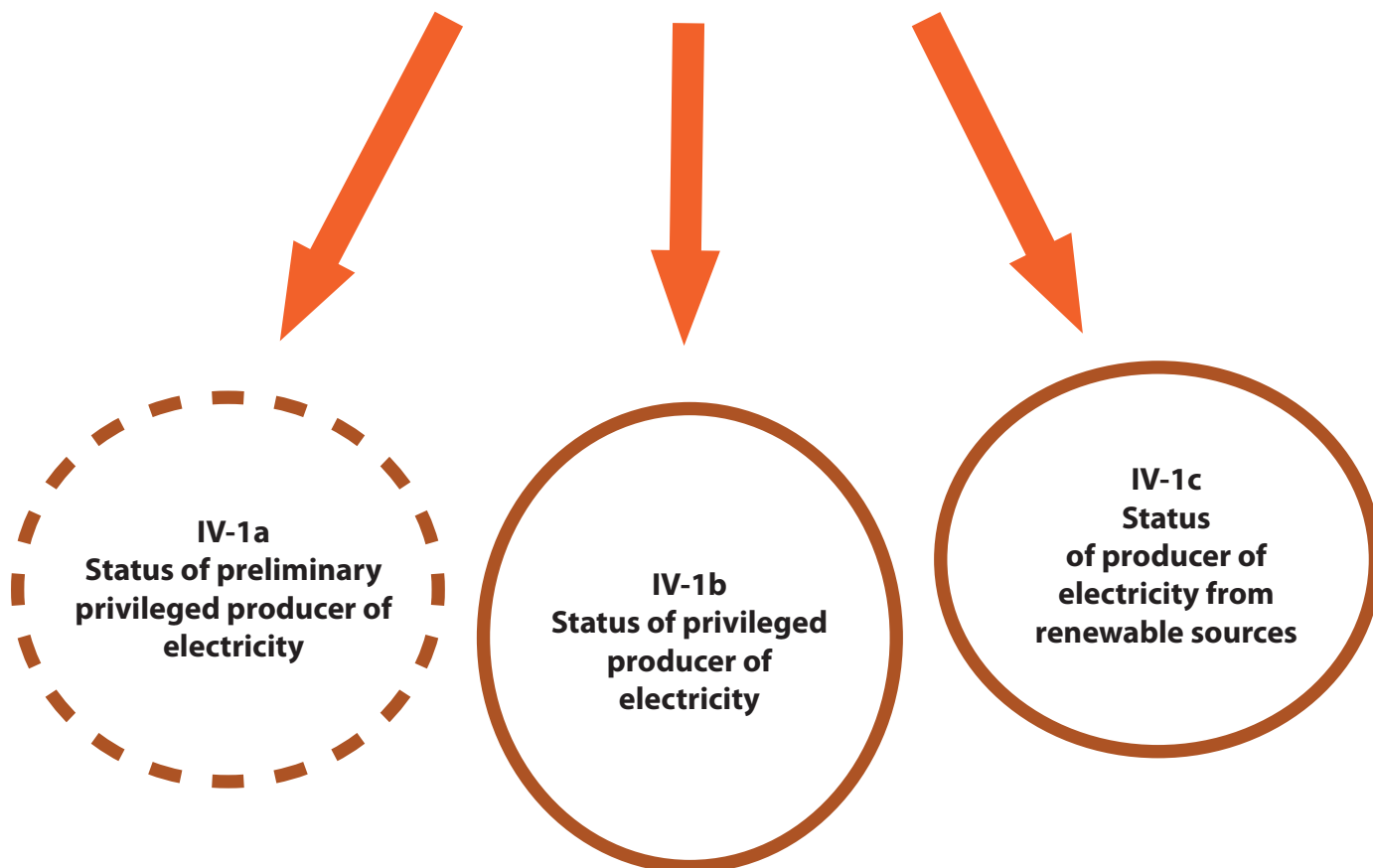




VI Acquiring the status of ((preliminary) privileged) producer of energy from renewable sources

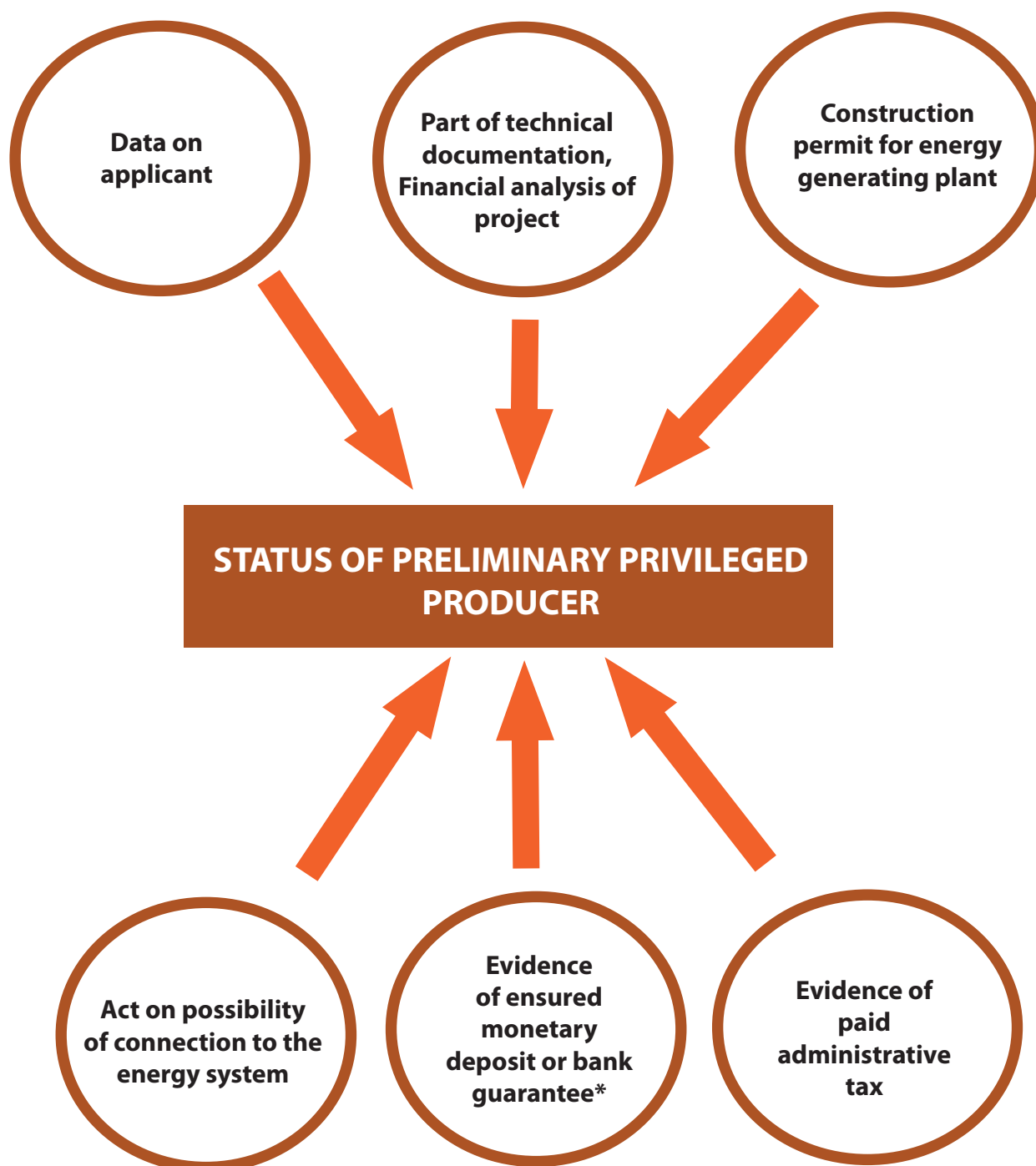


VI-1 Status of producer of electricity from renewable energy sources



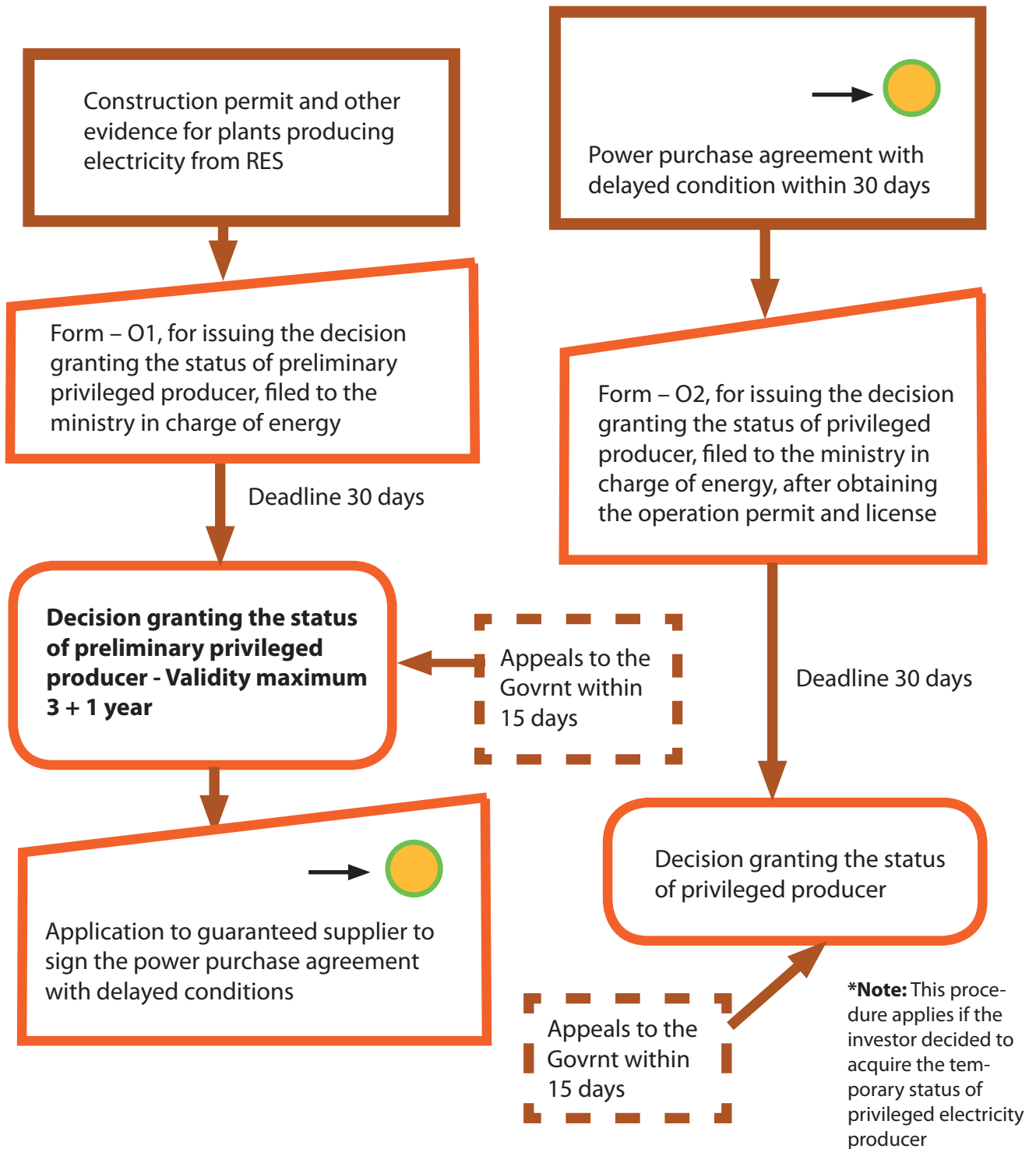
- **Energy entities and natural persons – only for installed capacity up to 30 kW.**
- **Cannot at the same time have two or more types of status.**
- **The above steps are not mandatory, but they do enable the acquiring of certain rights.**

VI-1a Status of preliminary privileged producer of electricity

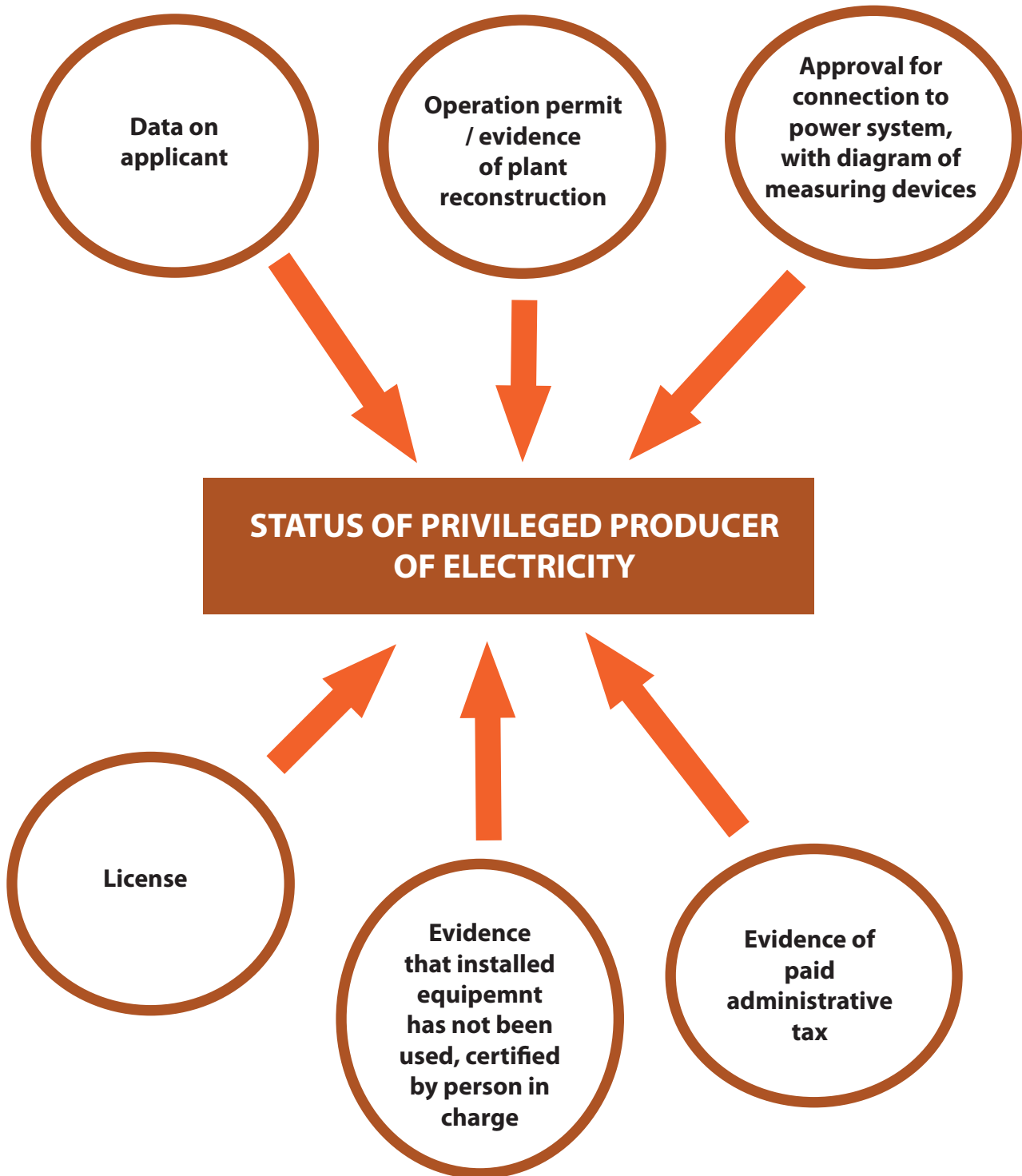


***Note:** for power plant of capacity exceeding 100 kW

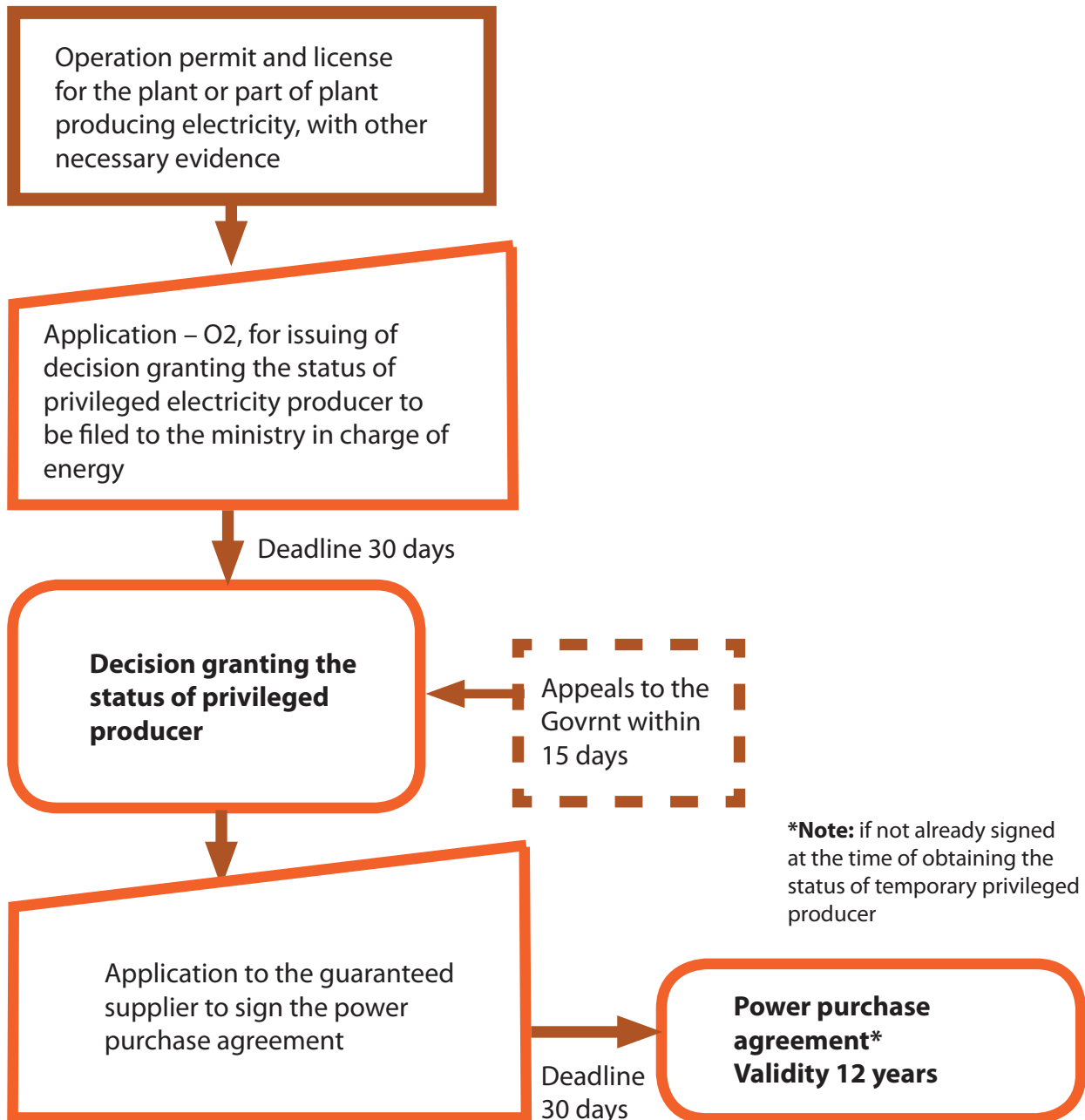
VI-1a,b Acquiring the status of (preliminary)* and the status of privileged producer of electricity



VI-1b Status of privileged producer of electricity



VI-1b Acquiring the status of privileged producer of electricity



VI-1a,b Incentives

- **The privileged electricity producer and the preliminary privileged producer shall acquire the rights to incentives by signing the power purchase agreement with the guaranteed supplier.**
- **Incentives: 1) taking over the balancing obligation by the guaranteed supplier; 2) taking over the costs of balancing, by the guaranteed supplier; 3) incentives period lasting for 12 years; 4) free access to transmission/distribution system; 5) privileged feed-in tariffs.**

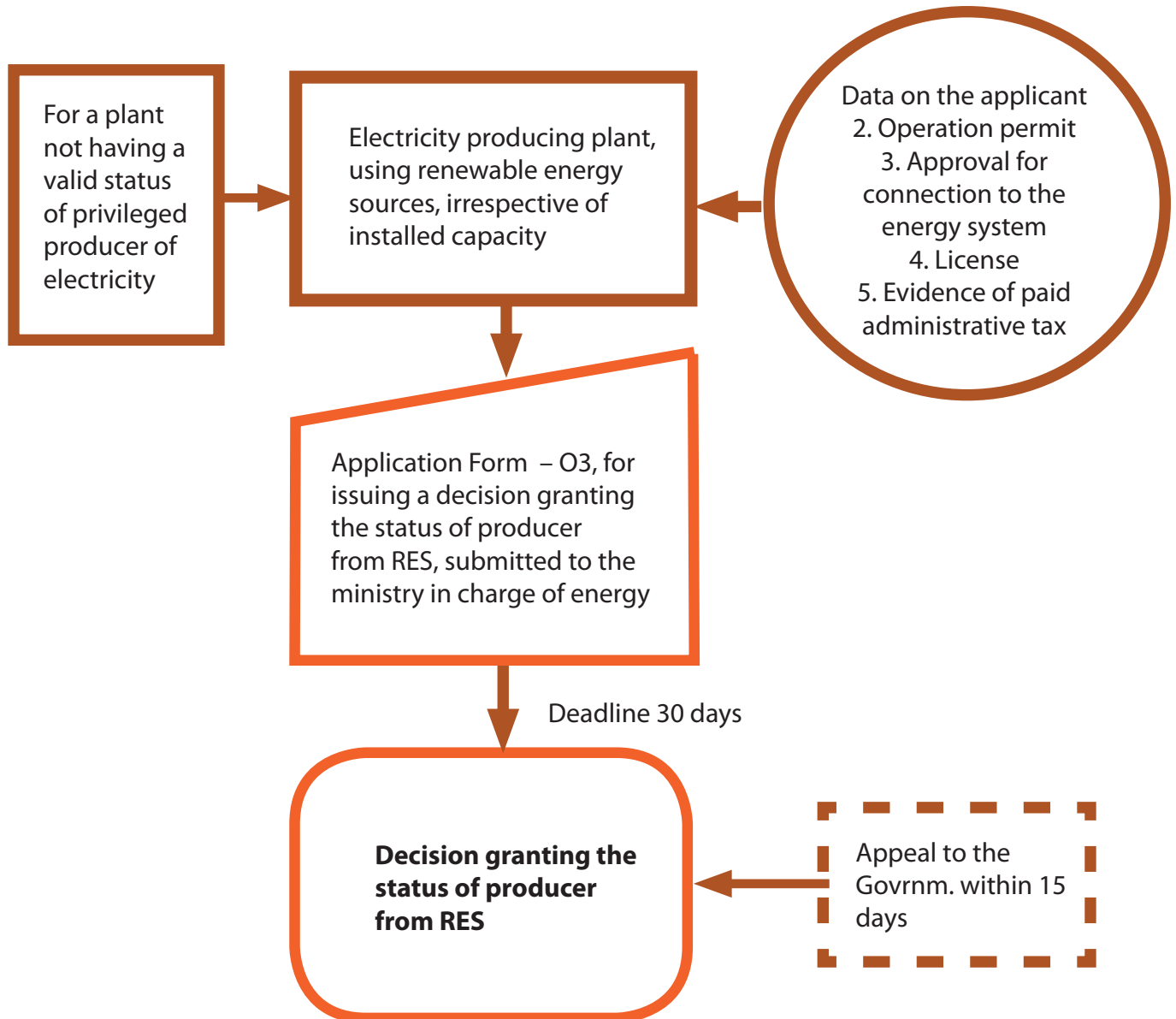
V- 3 Feed-in tariffs

- Feed-in tariffs for produced electricity are determined depending on the type and installed capacity of the plant, and the maximum effective operation time for the relevant type of plant.

Type of plant	Installed capacity P (MW)	Feed-in tariff (c€/kWh)	Maximum effective operation time (h)
Geothermal plant	-	8.2	8600 Per year of incentive period

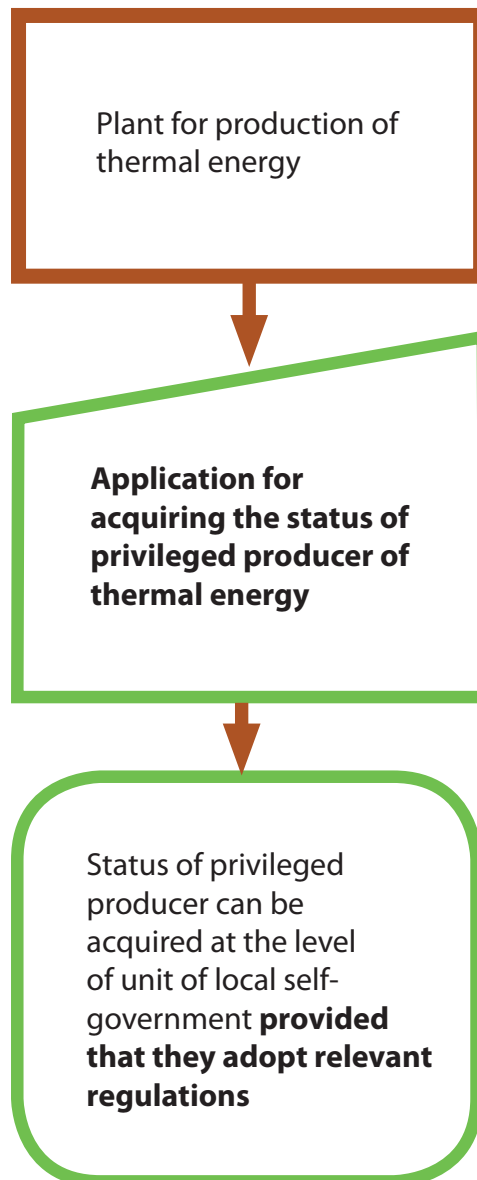
- The maximum produced electricity which can be purchased at incentive feed-in tariffs is calculated as $E_{el\ max} = P * t_{max}$, where: $E_{el\ max}$ – maximum produced electricity for which the privileged producer is entitled to incentive feed-in tariffs by the guaranteed supplier at tariffs stated in the above table, expressed in kWh; P – installed capacity of the plant or part thereof, expressed as kW; t_{max} – maximum effective time of operation as stated in the table, expressed in h.
- Until the expiration of each year of the incentive period, the additional produced electricity above the maximum produced electricity, shall be purchased by the guaranteed supplier at the price equivalent to 35% of the feed-in tariff. The privileged producer of electricity for reconstructed plants is entitled to the right to feed-in tariffs equivalent to 70% of the amount stated in the table. The preliminary privileged producer since the beginning of the incentive period exercises the right to feed-in tariffs equivalent to 50% of the value from the table.

VI-1c Acquiring the status of electricity producer from renewable energy sources



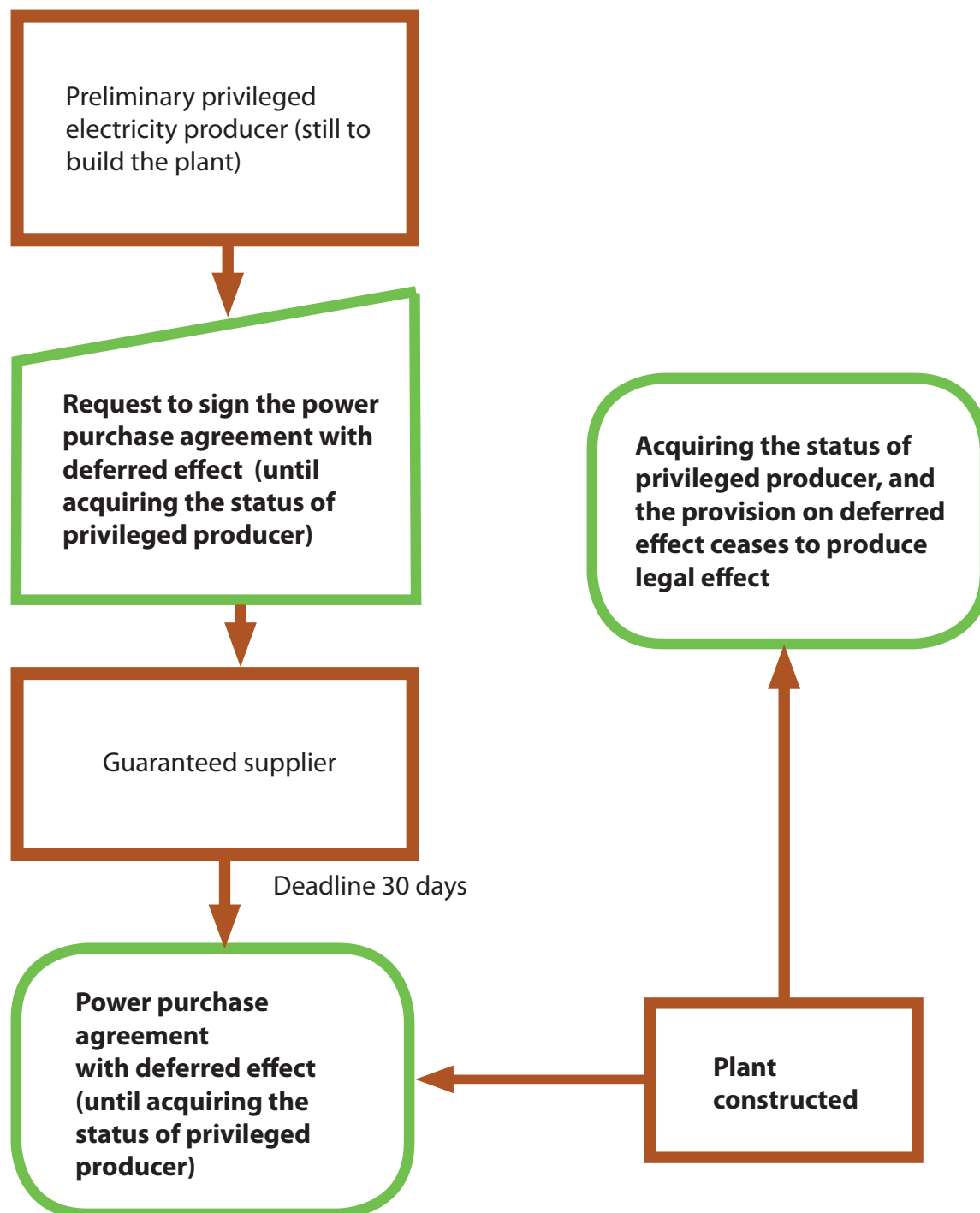
* **Note:** exercising the prior right in taking over the total amount of produced electricity to the transmission and distribution system, except in cases when the safe operation of these plants is at risk

VI-2 Acquiring the status of privileged producer of thermal energy



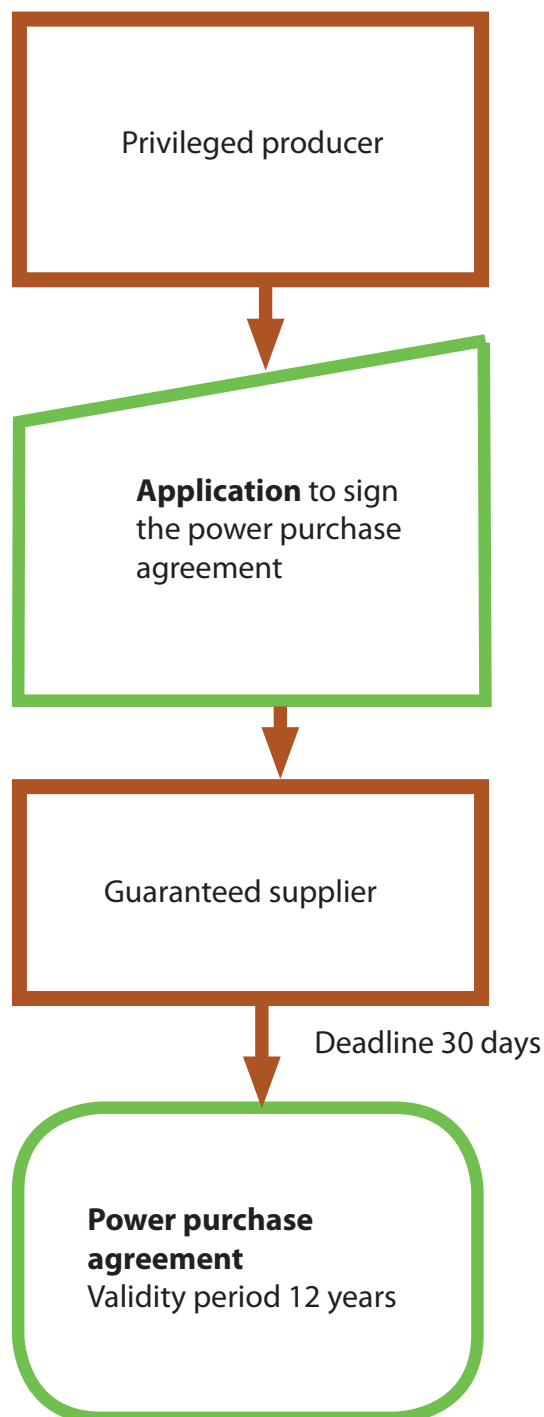
VII Production and sale of electricity

VII-1 Power purchase agreement with deferred effect



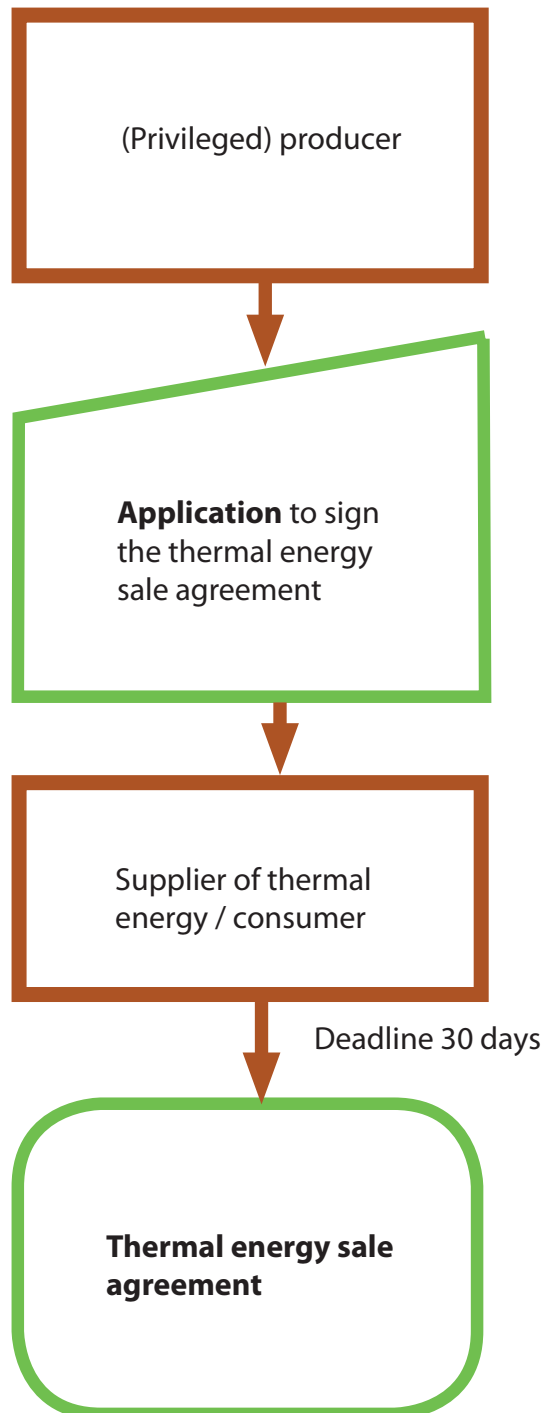
Note: there are also cases of power purchase agreements before the acquiring of status in order to implement the connection to the network

VII-2 Power purchase agreement with privileged electricity producer



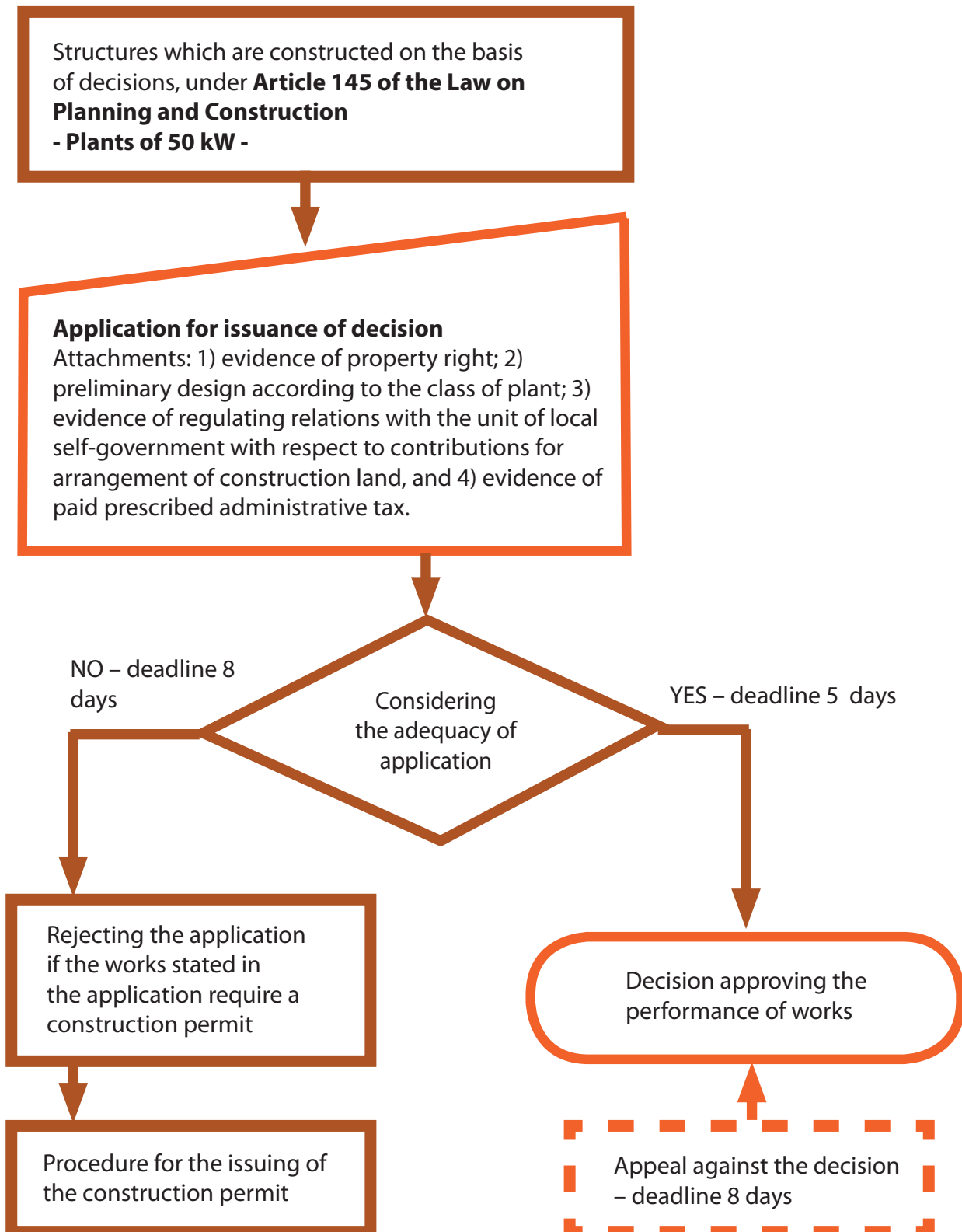
Note: there are also cases of power purchase agreements before the acquiring of status in order to implement the connection to the network

VII-3 Thermal energy sale agreement



VIII Special procedures

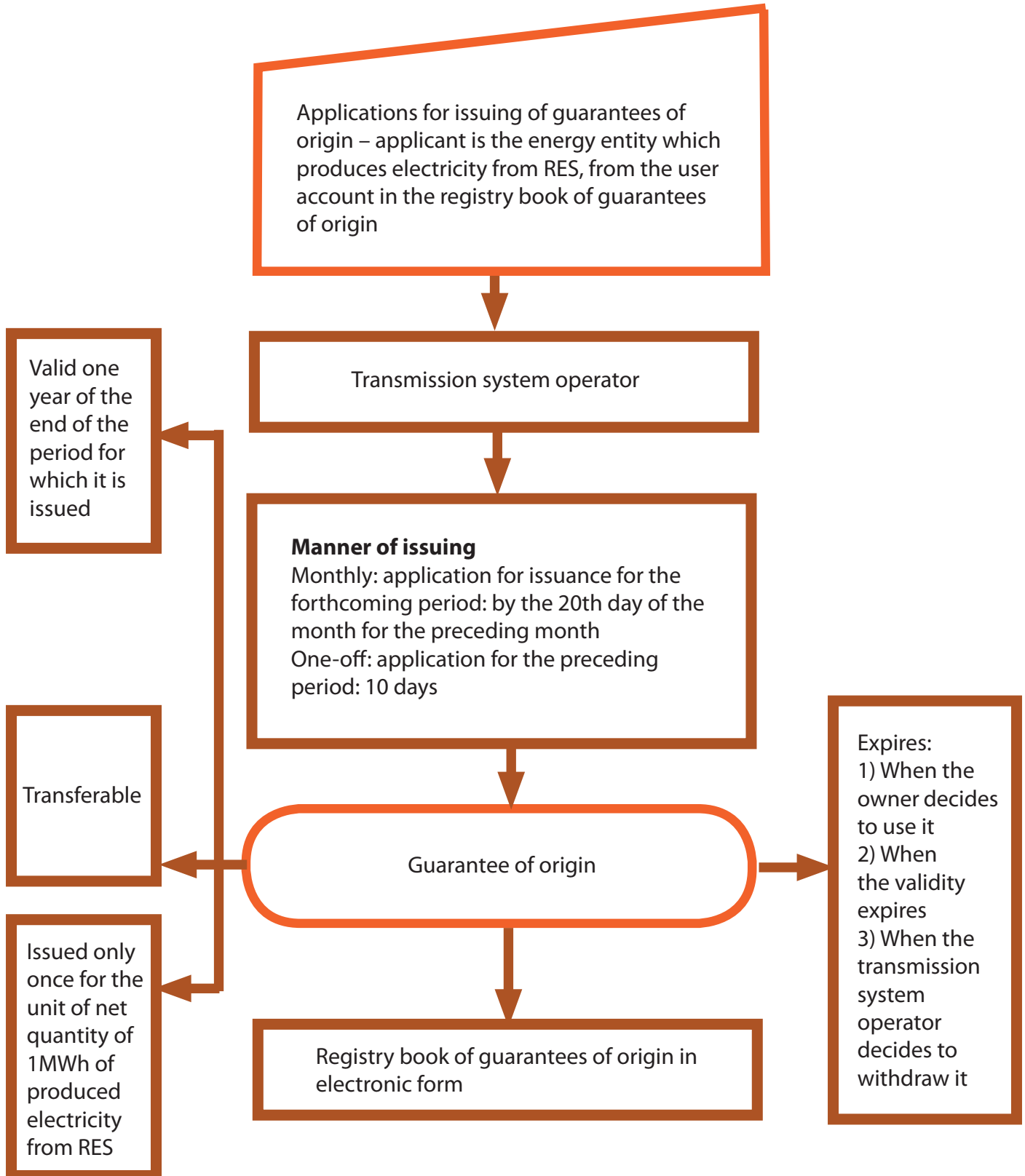
VIII-1 The special case of plant construction



VIII-2 Guarantee of origin

- **Document with the exclusive function to prove to the end buyer that the given share or quantity of energy has been generated from renewable energy sources, as well as from combined heat-and-power generation plants with a high efficiency coefficient of the primary energy.**
- **Guarantees of origin are electronic documents**
- **Guarantees of origin issued in other states are valid under the conditions of reciprocity also in the Republic of Serbia and in line with ratified international agreements**
- **Only for producers of electricity who have the status of producer from renewable sources.**

VIII-2 Issuing of guarantees of origin



Relevant Laws, Strategic Documents, Plans and Bylaws

Laws

1. The Energy Law, Official Gazette of RS No. 145/14
2. The Law on Mining and Geologic Explorations, Official Gazette of RS No. 101/15
3. The Law on the Spatial Plan of the Republic of Serbia, Official Gazette of RS No. 88/10
4. The Law on Environmental Protection, Official Gazette of RS No. 135/04, 36/09, and 14/16
5. The Law on Integrated Pollution Prevention and Control, Official Gazette of RS No. 135/04 and 25/15
6. Law on Planning and Construction, Official Gazette of RS No. 72/09, 81/09, 64/10 – decision of the Constitutional Court 24/11, 121/12, 42/13 - decision of the Constitutional Court 50/13 - decision of the Constitutional Court 98/13 - decision of the Constitutional Court 132/14 and 145/14
7. The Law on Forests, Official Gazette of RS No. 30/10 and 93/12
8. The Law on Waters Official Gazette of RS No. 30/10 and 93/12
9. The Law on Nature Protection, Official Gazette of RS No. 36/09, 88/10, 91/10 and 14/16
10. The Law on Air Pollution, Official Gazette of RS No. 36/09 and 10/13
11. The Law on Environmental Impact Assessment, Official Gazette of RS No. 135/04 and 36/09
12. The Law on Strategic Environmental Impact Assessment, Official Gazette of RS No. 135/04 and 88/10
13. General Administrative Procedure Law, Official Gazette of RS No. 18/16
14. The Law on Public Utilities, Official Gazette of RS No. 88/11
15. The Law on Public-Private Partnership and Concessions, Official Gazette of RS No. 88/11 and 15/16
16. The Company Law, Official Gazette of RS No. 36/11, 99/11, and 5/15
17. The Law on Public Companies, Official Gazette of RS No. 15/16
18. The Law on Spas, Official Gazette of RS No. 80/92

Strategies and Plans

1. The Strategy of Development of the Energy Sector of the Republic of Serbia until 2025 with Projections until 2030, Official Gazette of RS No. 101/15
2. National Renewable Energy Action Plan of the Republic of Serbia, Official Gazette of RS No. 53/13

Decrees

1. The Decree on Requirements and Procedure for Acquiring the Status of Privileged Electricity Producer, Preliminary Privileged Electricity Producer and Electricity Producer from Renewable Energy Sources, Official Gazette of RS No. 56/16
2. The Decree on the List of Projects for which the Environmental Impact Assessment Is Mandatory and on the List of Projects for which the Environmental Impact Assessment May be Requested, Official Gazette of RS No. 114/08

3. The Decree on Protection Regimes, Official Gazette of RS No. 31/12
4. The Decree on Location Requirements, Official Gazette of RS No. 35/15
5. The Decree on Conditions of Supply and Procurement of Electricity, Official Gazette of RS No. 63/13
6. Decree on Incentive Measures for Production of Electricity from Renewable Energy Sources and from High-efficiency Combined Production of Electricity and Heat, Official Gazette of RS No. 56/16
7. Decree on Power Purchase Agreement, Official Gazette of RS No. 56/16
8. The Decree on Fees for Incentives for Privileged Electricity Producers, Official Gazette of RS No. 12/16
9. The Decree on the Amount of Special Fee for Incentives for the Year 2016, Official Gazette of RS No. 12/16

Bylaws

1. The Rulebook on Energy Permit, Official Gazette of RS No. 15/15
2. Rulebook on the contents of geologic exploration designs and studies on results of geologic explorations, Official Gazette of RS No. 51/96
3. The Rulebook on Contents of Information on Location and on Contents of Location Permit, Official Gazette of RS No. 3/10
4. Rulebook on Content, Method and Manner of Development and Performing Control of Technical Documentation According to Class and Intended Use of the Structure, Official Gazette of RS No. 23/15
5. Rulebook on Classification of Structures, Official Gazette of RS No. 22/15
6. Rulebook on General Rules of Parcelization, Regulation and Construction, Official Gazette of RS No. 22/15
7. Rulebook on Contents and Form of the Application for Issuing Water acts and Contents of Opinion in the Procedure of Issuing Water acts, Official Gazette of RS No. 74/10, 116/12 and 58/14
8. Rulebook on Contents of the Application Concerning the Need for Impact Assessment and Contents of the Application for Determining Scope and Contents of the Environmental Impact Assessment Study, Official Gazette of RS No. 69/05
9. Rulebook on Contents of Environmental Impact Assessment Study, Official Gazette of RS No. 69/05
10. The Rulebook on the Content and Manner of Issuing the Construction Permit, Official Gazette of RS No. 93/11 and 103/13 – decision of the Constitutional Court
11. Rulebook on the Procedure for Integrated Permit, Official Gazette of RS No. 113/15
12. Rulebook on Closing and Marking of Closed Construction Site, Official Gazette of RS No. 22/15
13. Rulebook on Content and Manner of Technical Inspection of Structures, Composition of the Commission, Content of Proposed Decision of the Commission Regarding the Fitness of the Structure for Use, Surveillance of Soil during Construction and Use, and Minimum Guarantee Periods for Different Types of Structures, Official Gazette of RS No. 27/15
14. The Rulebook on Minimum Guarantee Periods for Different Types of Structures and Works, Official Gazette of RS No. 93/11
15. The Rulebook on Licenses for Performing Energy Activity and Certification, Official Gazette of RS No. 87/15
16. Decision Determining the Methodology for Calculation of costs of Connection to the Electricity Transmission and Distribution System, Official Gazette of RS No. 109/15