Zmluva č.
o poskytnutí finančných prostriedkov na spolufinancovanie projektu výskumu a vývoja Spoločného programu EÚ a členských krajín Eurostars 2

(ďalej len „zmluva")

uzatvorená podľa § 20 v spojení s § 10 ods. 3 písm. n) zákona č. 172/2005 Z. z. o organizácii štátnej podpory výskumu a vývoja a o doplnení zákona č. 575/2001 Z. z. o organizácii činnosti vlády a organizácii ústrednej štátnej správy v znení neskorších predpisov a § 8 zákona č. 523/2004 Z. z. o rozpočtových pravidlách verejnej správy a o zmene a doplnení niektorých zákonov v znení neskorších predpisov

medzi zmluvnými stranami

Poskytovateľ:	**Ministerstvo školstva, vedy, výskumu a športu Slovenskej republiky**
zastúpený :	Mgr. Branislav Gröhling, minister
sídlo:	Stromová 1, 813 30 Bratislava
IČO:	00 164 381
DIČ:	2020798725
osoba oprávnená rokovať v odborných veciach:	Mgr. Martin Šponiar, PhD., riaditeľ OIŠPEMIVV
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Bankové spojenie:	Štátna pokladnica
IBAN:	SK80 8180 0000 0070 0006 5236

*(ďalej len „**poskytovateľ**")*

a

Príjemca:	**Novo s.r.o.**
Zapísaný:	v Obchodnom registri Okresného súdu Trnava, Oddiel: Sro, vložka č.: 41999/T
zastúpený	Ing. Peter Novák MBA
sídlo:	Hlavná 106, 919 26 Zavar
IČO:	51458497
DIČ:	2120737091
osoba oprávnená rokovať v odborných veciach:	Ing. Peter Novák MBA
Tel. číslo:	0903 472 151
e-mail:	peter.novak@novo.sk
bankové spojenie:	Tatra banka, a.s.
IBAN:	SK52 1100 0000 0029 4005 4630

*(ďalej len „**príjemca**")*

*(„poskytovateľ" a „príjemca" ďalej spolu len „**zmluvné strany**")*

Preambula

Na základe Rozhodnutia Európskeho parlamentu a Rady č. 553/2014/EÚ z 15. mája 2014 a Nariadenia Európskeho parlamentu a Rady (EÚ) č. 1290/2013 z 11. decembra 2013, ktorým sa ustanovujú pravidlá účasti na programe „Horizont 2020" – rámcový program pre výskum a inováciu (2014 – 2020) a pravidlá jeho šírenia a ktorým sa zrušuje nariadenie (ES) č.1906/2006, sa Slovenská republika zúčastňuje a spoločne vykonáva s Európskou Úniou program Eurostars 2.

Na základe Bilaterálnej dohody Eurostars 2 uzavretej medzi Ministerstvom školstva, vedy, výskumu a športu Slovenskej republiky a Sekretariátom EUREKA so sídlom v Bruseli, podpísanej dňa 19. mája 2016 v Bruseli (ďalej len „bilaterálna dohoda"), je Ministerstvo školstva, vedy, výskumu a športu Slovenskej republiky národným financujúcim orgánom, ktorý zabezpečuje poskytovanie prostriedkov štátneho rozpočtu Slovenskej republiky na spolufinancovanie účasti slovenských subjektov výskumu a vývoja v projektoch spoločného programu Eurostars 2.

Technická špecifikácia projektu, ktorý je predmetom zmluvy (zoznam riešiteľov uvedeného projektu a ich kapacít viazaných na riešenie projektu, použitie finančných prostriedkov na riešenie projektu, ciele projektu v jednotlivých rokoch jeho riešenia a výstupy projektu), je uvedená v Prílohe 1, ktorá je neoddeliteľnou súčasťou tejto zmluvy.

Čl. 1
Predmet zmluvy

1) Predmetom zmluvy je poskytnutie finančných prostriedkov vo výške 298 464 € (slovom: dvestodeväťdesiatosemtisíc štyristošesťdesiatštyri eur) z prostriedkov štátneho rozpočtu Slovenskej republiky (ďalej len „finančné prostriedky") poskytovateľom príjemcovi na zabezpečenie spolufinancovania riešenia projektu výskumu a vývoja Spoločného programu EÚ a členských krajín Eurostars 2 s názvom **„Inteligentná recyklácia kovového odpadu v odpadovej vode na získanie keramických mikroprášok na báze kovu"** (ďalej len „projekt"). Ide o projekt 24. výzvy, ktorý bol pozitívne hodnotený komisiou nezávislých expertov v Bruseli a jeho riešenie bolo schválené Skupinou vysokých predstaviteľov EUREKA/Eurostars a potvrdené listom vedúceho Sekretariátu EUREKA v Bruseli (Oznámenie o výsledku hodnotenia prihlášky projektu tvorí Prílohu č. 2, ktorá je neoddeliteľnou súčasťou tejto zmluvy) (ďalej len „účel").

2) Poskytovateľ zabezpečuje spolufinancovanie riešenia projektu počas celej doby jeho realizácie.

3) Príjemca sa na základe Konzorciálnej zmluvy zo dňa 17.02.2021 uzatvorenej medzi účastníkmi projektu zaväzuje zabezpečiť riešenie projektu počas celej doby jeho realizácie od: **01. mája 2021 do 31. októbra 2023** (Konzorciálna zmluva tvorí Prílohu č. 3 a je neoddeliteľnou súčasťou tejto zmluvy).

Čl. 2
Práva a povinnosti zmluvných strán

1) Celkové oprávnené náklady na projekt sú vo výške 373 080 € (slovom: tristosedemdesiattritisíc osemdesiat eur), z toho:

a) výška finančných prostriedkov zo štátneho rozpočtu na krytie oprávnených nákladov je: 298 464,- € (slovom: dvestodeväťdesiatosemtisíc štyristošesťdesiatštyri eur), z toho:
bežné výdavky: 260 064,- €
(slovom: dvestošesťdesiattisíc šesťdesiatštyri eur)

kapitálové výdavky: 38 400,-€
(slovom: tridsaťosemtisíc štyristo eur),

b) výška vlastných prostriedkov príjemcu:
74 616,- € (slovom: sedemdesiatštyritisíc šesťstošestnásť eur).

2) Poskytovateľ poskytuje príjemcovi na spolufinancovanie projektu finančné prostriedky vo výške 80 % z celkových oprávnených nákladov na riešenie projektu.

3) Oprávnenými nákladmi na riešenie projektu (ďalej len „oprávnené náklady"), na ktoré sa finančné prostriedky poskytujú, sú náklady podľa § 17 ods. 2 až 5 zákona č. 172/2005 Z. z. o organizácii štátnej podpory výskumu a vývoja a o doplnení zákona č. 575/2001 Z. z. o organizácii činnosti vlády a organizácii ústrednej štátnej správy v znení neskorších predpisov (ďalej len „zákon o organizácii štátnej podpory výskumu a vývoja") a musia byť v súlade s Nariadením Komisie (EÚ) č. 651/2014 zo 17. júna 2014 o vyhlásení určitých kategórií pomoci za zlučiteľné s vnútorným trhom podľa článkov 107 a 108 Zmluvy EÚ. Nepriame náklady sa uplatňujú formou paušálnej sadzby 25% v zmysle ustanovení Nariadenia Európskeho parlamentu a Rady (EÚ) č. 1290/2013 z 11. decembra 2013, ktorým sa ustanovujú pravidlá účasti na programe Horizont 2020 – rámcový program pre výskum a inovácie (2014 – 2020) a pravidlá jeho šírenia, a ktorým sa zrušuje nariadenie (ES) č. 1906/2006. Špecifikácia projektu s uvedením celkových oprávnených nákladov, výšky spolufinancovania, výšky vlastných prostriedkov príjemcu vrátane percentuálneho vyjadrenia podielu financovania a harmonogramu riešenia projektu tvorí Prílohu č. 1 a je neoddeliteľnou súčasťou tejto zmluvy. Oprávnenosť nákladov na riešenie projektu v zmysle zmluvy posudzuje poskytovateľ.

4) Za oprávnené použitie finančných prostriedkov sa považuje bezhotovostný prevod finančných prostriedkov za účelom úhrady oprávnených nákladov na účel určený zmluvou (ďalej len „oprávnené použitie"). Za oprávnené použitie finančných prostriedkov sa považuje aj preukázaná hotovostná operácia vykonaná v nevyhnutnom a odôvodnenom rozsahu za účelom úhrady oprávnených nákladov účelu určeného zmluvou v rozsahu podľa osobitného zákona.

5) Oprávneným použitím finančných prostriedkov sú tiež bezhotovostné úhrady z bankového účtu príjemcu uvedeného v záhlaví zmluvy na iný účet príjemcu, ak príjemca pred poukázaním finančných prostriedkov na bankový účet uhradil z vlastných prostriedkov výdavok na účel určený zmluvou, najviac však v sume určenej v zmluve a najviac v sume takto použitých vlastných finančných prostriedkov.

6) Cestovné náhrady môžu byť z finančných prostriedkov uhradené len do výšky určenej zákonom č. 283/2002 Z. z. o cestovných náhradách v znení neskorších predpisov.

7) Úhrada dane z pridanej hodnoty nie je u príjemcu považovaná za oprávnený náklad, ak má príjemca nárok na jej odpočítanie z vlastnej daňovej povinnosti.

8) Zmluvné strany sa dohodli, že finančné prostriedky možno použiť na oprávnené náklady, ktoré boli uhradené v období od **01. mája 2021 do 31. októbra 2023**.

9) Poskytovateľ poskytne príjemcovi finančné prostriedky na bankový účet príjemcu uvedený v záhlaví zmluvy v jednotlivých rokoch riešenia projektu v zmysle Prílohy 1 nasledovným spôsobom:

a) v roku 2021 vo výške 112 558,93 € (slovom: jednostodvanásťtisíc päťstopäťdesiatosem eur a deväťdesiattri centov),
z toho
- 74 158,93 € (slovom: sedemdesiatštyritisíc jednostopäťdesiatosem eur a deväťdesiattri centov) vo forme bežných výdavkov,
- 38 400,00 € (slovom: tridsaťosemtisíc štyristo eur) vo forme kapitálových výdavkov,

b) v roku 2022 vo výške 96 781,87 € (slovom: deväťdesiatšesťtisíc sedemstoosemdesiatjeden eur a osemdesiatsedem centov) vo forme bežných výdavkov,

c) v roku 2023 vo výške 89 123,20 € (slovom: osemdesiatdeväťtisíc jednostodvadsaťtri eur a dvadsať centov) vo forme bežných výdavkov.

10) V roku 2021 poskytovateľ poskytne dotáciu na bankový účet príjemcu do 20 pracovných dní odo dňa účinnosti tejto zmluvy.

11) V rokoch 2022 až 2023 poskytovateľ poskytne finančné prostriedky štátneho rozpočtu Slovenskej republiky na účet príjemcu na základe výsledkov monitorovania a kontroly použitia prostriedkov štátneho rozpočtu Slovenskej republiky, poskytnutých príjemcovi v predchádzajúcom rozpočtovom roku, ktorú vykonáva poskytovateľ. Splnenie všetkých povinností zo strany príjemcu vyplývajúcich mu z tejto zmluvy v príslušnom rozpočtovom roku je podmienkou pre poskytnutie finančných prostriedkov podľa ustanovení tejto zmluvy v nasledujúcom rozpočtovom roku.

12) Príjemca sa zaväzuje použiť finančné prostriedky výlučne na účel určený zmluvou. Príjemca zodpovedá za účelné, hospodárne, účinné a efektívne použitie finančných prostriedkov a ich riadne vedeni
e v účtovníctve.[1]

13) Použitie finančných prostriedkov poskytnutých podľa zmluvy podlieha povinnému ročnému zúčtovaniu so štátnym rozpočtom, v termíne a spôsobom určeným poskytovateľom. Príjemca je

[1] Zákon č. 431/2002 Z. z. o účtovníctve v znení neskorších predpisov

povinný predložiť poskytovateľovi monitorovaciu správu, v rámci ktorej vykoná komplexné **vyúčtovanie** finančných prostriedkov (ďalej len „vyúčtovanie") v termíne **do 28. februára nasledujúceho rozpočtového roka,** v prípade poskytnutia dotácie pred 1. augustom rozpočtového roka a v prípade poskytnutia dotácie po 31. júli rozpočtového roka v termíne do **15. apríla** nasledujúceho rozpočtového roka; v poslednom roku riešenia do **15. novembra 2023**.

Vyúčtovanie musí obsahovať najmä

a) vecné vyhodnotenie plnenia účelu určeného zmluvou,
b) súpis realizovaných činností s vyčíslením použitých finančných prostriedkov,
c) kópie príslušnej dokumentácie preukazujúcej použitie finančných prostriedkov.

Príjemca je podľa bodu c) povinný predložiť najmä kópie faktúr, príp. dokladov rovnocennej dôkaznej hodnoty (napr. kópie výpisov z bankového účtu), ktoré potvrdzujú uhradenie deklarovaných výdavkov. Mzdy riešiteľov a odvody je príjemca povinný preukázať najmä mzdovým listom, podkladmi z účtovníctva o odvodoch príjemcu za riešiteľov samostatne a kópiou výpisu z bankového účtu ako doklade o úhrade odvodov a miezd.

Spôsob vyúčtovania bližšie určí poskytovateľ v nadväznosti na usmernenie Ministerstva financií Slovenskej republiky. Príjemca sa zaväzuje, že zabezpečí vecné vyhodnotenie a finančné dokladové vyúčtovanie finančných prostriedkov zo štátneho rozpočtu podľa všeobecne záväzných právnych predpisov, podľa Pokynu Ministerstva financií Slovenskej republiky za príslušný rozpočtový rok a v termínoch určených Ministerstvom financií Slovenskej republiky a poskytovateľom. Riadne a včasné vyúčtovanie poskytnutých prostriedkov je jednou z podmienok pre poskytnutie finančných prostriedkov v nasledujúcom rozpočtovom roku.

14) V prípade, že príjemca nedodrží svoj záväzok podľa odseku 12 a 13 tohto článku, nie je poskytovateľ viazaný povinnosťou podľa odseku 9 tohto článku, pričom ustanovenia čl. 5. ods. 2 a 3 tejto zmluvy zostávajú nedotknuté.

15) Príjemca je povinný predložiť poskytovateľovi **do 30. 11. príslušného roka predbežnú informáciu o čerpaní finančných prostriedkov** za daný rok a **výhľad čerpania týchto prostriedkov do 31. 12. príslušného roka**. Ak príjemca zistí, že nebude schopný vynaložiť finančné prostriedky na oprávnené náklady určené v príslušnom roku v plnom rozsahu, je povinný postupovať podľa ods. 16.

16) Prostriedky poskytnuté pred 1. augustom príslušného rozpočtového roka môže príjemca použiť iba do konca rozpočtového roka, nepoužité prostriedky je povinný vrátiť:

a) do konca príslušného rozpočtového roka na výdavkový účet poskytovateľa SK80 8180 0000 0070 0006 5236, Štátna pokladnica, variabilný symbol číslo 1009.
b) do 15. januára nasledujúceho rozpočtového roka na depozitný účet SK68 8180 0000 0070 0006 3900, Štátna pokladnica, variabilný symbol číslo 1009.

Bežné výdavky, ktoré boli poskytnuté príjemcovi po 31. júli rozpočtového roka a ktoré nebolo možné použiť do konca príslušného rozpočtového roka, možno použiť do 31. marca nasledujúceho rozpočtového roka v súlade s § 8 ods. 5 zákona č. 523/2004 Z. z. o rozpočtových pravidlách verejnej správy a o zmene a doplnení niektorých zákonov v znení neskorších predpisov (ďalej len „zákon o rozpočtových pravidlách"). Nepoužité finančné prostriedky je príjemca povinný vrátiť do 15. apríla na depozitný účet poskytovateľa SK68 8180 0000 0070 0006 3900, Štátna pokladnica, variabilný symbol číslo 1009. O vrátení nepoužitých prostriedkov je príjemca povinný poslať poskytovateľovi písomné oznámenie.

17) V prípade použitia finančných prostriedkov **v rozpore so zmluvou** a/alebo **mimo termínu vyúčtovania uvedeného v ods. 13** (ďalej len „neoprávnené použitie"), je príjemca povinný vrátiť neoprávnene použité finančné prostriedky:

a) na výdavkový účet poskytovateľa **SK 80 8180 0000 0070 0006 5236**, ak neoprávnené použitie bolo zistené v tom istom rozpočtovom roku, v ktorom mu boli finančné prostriedky poskytnuté;

b) na príjmový účet poskytovateľa **SK 94 8180 0000 0700 0006 3820**, ak neoprávnené použitie bolo zistené v nasledujúcom rozpočtovom roku.

V obidvoch prípadoch je príjemca povinný vrátiť finančné prostriedky **do 30 kalendárnych dní** od zistenia ich neoprávneného použitia.

18) Výnos z poskytnutých finančných prostriedkov je podľa § 7 ods. 1 písm. m) zákona o rozpočtových pravidlách verejnej správy v spojení s Metodickým usmernením Ministerstva financií Slovenskej republiky číslo MF/7415/2005-421 príjmom štátneho rozpočtu Slovenskej republiky.

19) Výnosom z finančných prostriedkov určeným na vykonanie odvodu finančných prostriedkov do štátneho rozpočtu sú finančné prostriedky, ktoré zostali na účte príjemcu po odpočítaní celého poplatku za vedenie účtu príjemcu od úrokov z finančných prostriedkov pripisovaných bankou.

20) **Lehota na vykonanie odvodu výnosov** z finančných prostriedkov z roku 2021, vedených na účte príjemcu, na príjmový účet poskytovateľa **SK19 8180 0000 0070 0006 3812**, je **31. január nasledujúceho rozpočtového roka.**

21) Ak riešenie projektu vyžaduje zaobstaranie tovarov, služieb a prác, príjemca je povinný postupovať pri zadávaní zákaziek na dodanie tovarov, prác a služieb v súlade so zákonom č. 343/2015 Z. z. o verejnom obstarávaní a o zmene a doplnení niektorých zákonov v znení neskorších predpisov (ďalej len „zákon o verejnom obstarávaní "). Ak sa Zákon o verejnom obstarávaní nevzťahuje na obstaranie zákazky, príjemca je povinný preukázať hospodárnosť obstarávaných tovarov, služieb a prác najmä prostredníctvom prieskumu trhu.

22) Pre zabezpečenie priebežnej kontroly sa príjemca zaväzuje predložiť poskytovateľovi na posúdenie každú novo uzatváranú zmluvu alebo dodatok k zmluve, spolu so schvaľovacou doložkou, ktorá obsahuje všetky relevantné údaje o spôsobe verejného obstarávania a o finančnom krytí z finančných prostriedkov.

23) Poskytovateľ je oprávnený preveriť účelnosť použitia finančných prostriedkov, a to kedykoľvek, a aj opakovane, najneskôr však do dvoch rokov od ukončenia projektu, ak právny predpis neurčuje inak. Príjemca je povinný poskytnúť poskytovateľovi za týmto účelom maximálnu možnú súčinnosť.

24) Poskytovateľ má právo prostredníctvom ním povereného zástupcu zúčastniť sa na procese verejného obstarávania ako člen komisie bez práva vyhodnocovať ponuky, pričom príjemca sa zaväzuje poskytovateľa o uvedenom primeraným spôsobom včas informovať.

25) Príjemca je povinný uchovávať všetky dokumenty a doklady, vrátane účtovných dokladov, týkajúcich sa projektu v súlade s príslušnými právnymi predpismi.

26) Príjemca je povinný počas realizácie projektu poskytovať na požiadanie Sekretariátu EUREKA presné informácie týkajúce sa postupu riešenia projektu a využitia výsledkov projektu počas troch rokov od ukončenia projektu podľa článku 4, bodu 4.3.5 bilaterálnej dohody.

27) Príjemca je oprávnený a zároveň povinný počas realizácie projektu využiť finančné prostriedky na dosiahnutie kvantifikovateľných výsledkov a ukazovateľov určených v Prílohe 4. Príjemca je povinný splniť kvantifikovateľné výsledky.

28) Príjemca je povinný zabezpečiť viditeľnosť financovania zo zdrojov EÚ v zmysle článku 6 bilaterálnej dohody.

29) Príjemca sa zaväzuje, že pri spolufinancovaní projektu Spoločného programu EÚ a členských krajín Eurostars 2(ďalej len „spoločný program Eurostars 2 "), nebudú použité ďalšie finančné zdroje Spoločenstva.

30) Príjemca je povinný uvádzať v akejkoľvek správe alebo materiáli, ktorý súvisí alebo vyplýva z akejkoľvek činnosti spoločného programu Eurostars 2, logo Európskej únie, logo spoločného programu Eurostars 2 a číslo alebo skratku projektu spoločného programu Eurostars 2. Sprievodný text musí jednoznačne uvádzať, že projekt spoločného programu Eurostars 2 spolufinancuje Európska únia a musí tiež obsahovať logo Ministerstva školstva, vedy, výskumu a športu Slovenskej republiky ako orgánu poskytujúceho spolufinancovanie projektu.

Čl. 3
Kontrola

1) Príjemca umožní Sekretariátu EUREKA, Európskej komisii, Európskemu úradu pre boj proti podvodom a Dvoru audítorov, podľa článku 18 bilaterálnej dohody, výkon ich kontrolných práv.

2) Príjemca berie na vedomie, že poskytnuté finančné prostriedky sú prostriedky zo štátneho rozpočtu Slovenskej republiky. Na použitie týchto prostriedkov, kontrolu ich použitia a ich vymáhanie v prípade neoprávneného použitia sa vzťahujú príslušné právne predpisy (napr. zákon o rozpočtových pravidlách verejnej správy, zákon č. 357/2015 Z. z. o finančnej kontrole a audite a o zmene a doplnení niektorých zákonov v znení neskorších predpisov (ďalej len „zákon o finančnej kontrole a audite"), zákon o účtovníctve, zákon o verejnom obstarávaní).

3) Poskytovateľ je oprávnený vykonať pre svoje potreby finančnú kontrolu podľa zákona o finančnej kontrole a audite počas trvania zmluvného vzťahu medzi poskytovateľom a príjemcom, ako aj po jeho ukončení, a to aj v prípade odstúpenia od zmluvy.

4) Prijemca je povinný pri výkone kontroly alebo auditu dodržiavať ustanovenia § 20 a § 21 zákona o finančnej kontrole a audite.

5) Príjemca je povinný dodržiavať ustanovenia právnych predpisov Slovenskej republiky a Európskej únie v oblasti štátnej pomoci súvisiace s touto zmluvou a to najmä zákon o rozpočtových pravidlách verejnej správy , zákon č. 358/2015 Z. z. o úprave niektorých vzťahov v oblasti štátnej pomoci a minimálnej pomoci a o zmene a doplnení niektorých zákonov (zákon o štátnej pomoci) a Nariadenie komisie (EÚ) č. 651/2014 o vyhlásení určitých kategórií pomoci za zlučiteľné s vnútorným trhom podľa článkov 107 a 108 zmluvy o fungovaní Európskej únie.

Čl. 4
Doba trvania a zánik zmluvy

1) Táto zmluva sa uzatvára na dobu určitú, a to odo dňa nadobudnutia účinnosti zmluvy do dňa, kedy poskytovateľ schváli vyúčtovanie finančných prostriedkov vyhotovené príjemcom podľa tejto zmluvy.

2) Zmluvné strany sa dohodli, že zmluva zaniká:
   a) **uplynutím doby**, na ktorú je uzavretá;
   b) **písomnou dohodou zmluvných strán**. Príjemca je v tomto prípade povinný vrátiť nepoužité finančné prostriedky poskytovateľovi najneskôr **do 30 kalendárnych dní** od ukončenia zmluvy na účet poskytovateľa **SK 80 8180 0000 0070 0006 5236**;
   c) na základe **písomnej výpovede** podľa § 20 ods. 3 zákona o organizácii štátnej podpory výskumu a vývoja . Ak príjemca neplní podmienky zmluvy, poskytovateľ má právo vypovedať zmluvu a požadovať vrátenie finančných prostriedkov poskytnutých na riešenie projektu najneskôr do 30 dní od vypovedania zmluvy. Poskytovateľ je povinný zaslať písomnú výpoveď príjemcovi na adresu uvedenú v záhlaví zmluvy;
   d) odstúpením od zmluvy.

3) Poskytovateľ má právo odstúpiť od zmluvy z dôvodov podstatného porušenia zmluvy zo strany príjemcu a za podmienok uvedených v článku 5.

Čl. 5
Odstúpenie od zmluvy a sankcie

1) Príjemca je povinný dodržiavať príslušné právne predpisy, a to predovšetkým, nie však výlučne, ustanovenia zákona o organizácii štátnej podpory výskumu a vývoja ., zákona o rozpočtových pravidlách verejnej správy a zároveň plniť všetky povinnosti, ktoré mu vyplývajú zo zmluvy. Porušenie ustanovení zmluvy alebo príslušných právnych predpisov sa považuje za porušenie finančnej disciplíny a sú s ním spojené sankcie uvedené najmä v § 31 zákona o rozpočtových pravidlách verejnej správy.

2) Poskytovateľ má právo odstúpiť od zmluvy, ak
   a) príjemca podstatným spôsobom porušuje ustanovenia tejto zmluvy,
   b) riešenie projektu má závažné chyby, ktoré boli zistené pri monitorovaní a kontrole riešenia projektu,
   c) dôjde k zrušeniu resp. ukončeniu projektu.

3) Zmluvné strany sa dohodli, že za podstatné porušenie zmluvy príjemcom podľa ods. 2 písm. a) tohto článku sa považuje najmä použitie finančných prostriedkov v rozpore s účelom podľa čl. 1 ods. 1 tejto zmluvy a porušenie ktorejkoľvek z povinností uvedených v čl. 2 zmluvy.

4) Odstúpenie od zmluvy je potrebné druhej zmluvnej strane oznámiť písomne. Odstúpením od zmluvy zmluva zaniká doručením písomného prejavu o odstúpení od zmluvy druhej zmluvnej strane na adresu uvedenú v záhlaví zmluvy.

5) Ak poskytovateľ odstúpi od zmluvy z dôvodov podľa ods. 2 písm. a) alebo b), má právo požadovať od príjemcu vrátenie všetkých finančných prostriedkov poskytnutých príjemcovi a príjemca je v takom prípade povinný všetky finančné prostriedky poskytovateľovi vrátiť

najneskôr do 15 kalendárnych dní odo dňa doručenia výzvy na ich vrátenie. Tým nie je dotknuté právo poskytovateľa na náhradu škody.

6) Ak poskytovateľ odstúpi od zmluvy z dôvodov podľa ods. 2 písm. c), má právo požadovať od príjemcu vrátenie časti finančných prostriedkov, ktoré boli použité príjemcom po termíne zrušenia resp. ukončenia projektu.

7) V prípade odstúpenia od zmluvy podľa odsekov 5 a 6 je príjemca povinný bez zbytočného odkladu vrátiť poskytnuté finančné prostriedky:

a) na výdavkový účet poskytovateľa **SK80 8180 0000 0070 0006 5236**, ak sa finančné prostriedky vracajú **v tom istom rozpočtovom roku**, v ktorom boli poskytnuté príjemcovi,

b) na príjmový účet poskytovateľa **SK94 8180 0000 0070 0006 3820**, ak sa finančné prostriedky vracajú **v inom rozpočtovom roku** ako v tom, v ktorom boli poskytnuté príjemcovi.
O vrátení finančných prostriedkov je prijímateľ povinný poslať poskytovateľovi písomné oznámenie.

Čl. 6
Zodpovednosť za škodu

Zmluvná strana, ktorá poruší svoju povinnosť vyplývajúcu zo zmluvy, je povinná nahradiť škodu tým spôsobenú druhej strane, ibaže preukáže, že porušenie povinnosti bolo spôsobené okolnosťami vylučujúcimi zodpovednosť. Zodpovednosť za škodu sa ďalej spravuje ustanoveniami § 373 a nasl. zákona č. 513/1991 Zb. Obchodný zákonník v znení neskorších predpisov.

Čl. 7
Práva k výsledkom riešenia projektu

1) Všetky práva k výsledkom riešenia projektu sa posudzujú podľa § 21 zákona o organizácii štátnej podpory výskumu a vývoja.

2) Spôsob využitia výsledkov riešenia projektu sa riadi pravidlami účasti na programe Horizont 2020 a Konzorciálnou zmluvou (Príloha 3) a je špecifikovaný v Prílohe 1 časť B: Ciele, harmonogram a výstupy projektu.

3) Vlastníkom hnuteľných vecí a nehnuteľností obstaraných z finančných prostriedkov je príjemca, ktorý si uvedený majetok obstaral alebo vytvoril pri riešení projektu, v súlade s § 21 ods. 2 zákona o organizácii štátnej podpory výskumu a vývoja.

Čl. 8
Záverečné ustanovenia

1) Zmluvné strany sa zaväzujú navzájom sa písomne informovať o zmenách ich identifikačných údajov uvedených v zmluve (najmä kontaktných údajov, štatutárneho orgánu, bankového účtu a pod.), ako aj akýchkoľvek iných zmenách a skutočnostiach, ktoré môžu mať vplyv na práva a povinnosti zmluvných strán vyplývajúcich zo zmluvy (ďalej len „skutočnosti"), a to

najneskôr do 30 dní od vzniku zmeny, resp. odo dňa, keď sa zmluvné strany dozvedeli o skutočnosti.

2) Zmluvné strany sa dohodli, že meniť a dopĺňať zmluvu možno len po vzájomnej dohode zmluvných strán formou očíslovaných písomných dodatkov, ktoré sú neoddeliteľnou súčasťou zmluvy. Zmluvné strany sa k návrhu písomného dodatku vyjadria v lehote do 30 dní odo dňa jeho doručenia.

3) Vzťahy medzi zmluvnými stranami vyslovene neupravené v zmluve sa riadia príslušnými ustanoveniami zákona o organizácii štátnej podpory výskumu a vývoja , zákona č. 523/2004 Z. z. a ďalších právnych predpisov Slovenskej republiky.

4) Neoddeliteľnou súčasťou zmluvy sú Prílohy 1, 2, 3 a 4.

5) Táto zmluva je vyhotovená v šiestich (6) originálnych rovnopisoch, z ktorých tri (3) vyhotovenia obdrží poskytovateľ a tri (3) vyhotovenia obdrží príjemca.

6) Zmluvné strany po prečítaní zmluvy vyhlasujú, že jej obsahu porozumeli a tento zodpovedá skutočnému prejavu ich vôle a na znak vzájomného súhlasu ju podpisujú.

7) Zmluva nadobúda platnosť dňom podpisu obidvoma zmluvnými stranami a účinnosť dňom nasledujúcim po dni jej zverejnenia v Centrálnom registri zmlúv.

8) Neoddeliteľnou súčasťou zmluvy sú prílohy:

Príloha 1:	Technická špecifikácia projektu
Príloha 2:	Oznámenie o výsledku hodnotenia prihlášky projektu
Príloha 3:	Konzorciálna zmluva
Príloha 4:	Kvantifikovateľné výsledky projektu

V Bratislave dňa .....

Za poskytovateľa:

.....

Mgr. Branislav Gröhling
minister

V Bratislave dňa .....

Za príjemcu:

.....

Ing. Peter Novák MBA
konateľ

Príloha 1

Špecifikácia projektu Eurostars2

Názov projektu	Inteligentná recyklácia kovového odpadu v odpadovej vode na získanie keramických mikroprášok na báze kovu	
Akronym projektu	**SmartMic**	
Odbor výskumu a vývoja[1]	010404 - *Fyzikálna chémia, 020503 - Chémia a technológia životného prostredia, 020507 - Recyklačné technológie*	
Charakter projektu	Aplikovaný výskum	
Doba riešenia projektu	Od: 01.05.2021	Do: 31.10.2023
Celkové náklady na projekt (v eurách)	373 080 €	
Výška spolufinancovania projektu z prostriedkov MŠVVaŠ SR (v eurách)	298 464 €	
Výška vlastných prostriedkov žiadateľa	74 616€	
Podiel spolufinancovania z prostriedkov štátneho rozpočtu Slovenskej republiky na celkových oprávnených nákladoch (v %)	80% - mikropodnik	
Zodpovedný riešiteľ projektu (meno, priezvisko, tituly, č. telefónu, e-mail)	Ing. Peter Novák MBA t.č.: 0903 472 151, e-mail: peter.novak@novo.sk	

A. 2 Zodpovedná organizácia	Základné údaje o zodpovednej organizácii
Názov organizácie	NOVO s.r.o.
Skrátený názov	NOVO
Adresa	Hlavná 106, 919 26 Zavar
Samosprávny kraj	Trnavský
IČO	51458497
Príslušnosť k rezortu	Ministerstvo hospodárstva
Typ organizácie	s.r.o.
Odvetvie podľa OKEČ (odvetvová klasifikácia ekonomických činností)	Výskum a vývoj
Štatutárny zástupca (meno, priezvisko, tituly)	Ing. Peter Novák MBA

[1] Podľa smernice č.27/2006-R z 21. decembra 2006 o sústave odborov vedy a techniky a číselníku odborov vedy a techniky

A. 3 Zoznam riešiteľov						
Zoznam riešiteľov priamo sa podieľajúcich na riešení projektu						
Meno a priezvisko	Tituly	Pracovné zaradenie	Dátum narodenia	IČO organizácie	Počet osobomesiacov	Poznámky
Martin Šmihál	Ing.	Výskumný /vývojový pracovník	23.5.1989	51458497	19	
Andrej Kerpner	Ing.	Výskumný /vývojový pracovník	2.12.1985	51458497	19	
Peter Mráz	Ing.	Výskumný /vývojový pracovník	17.6.1980	51458497	19	
Tomáš Kellich	Mgr.	Produktový inžinier	13.3.1989	51458497	19	

A.4 Zoznam riešiteľov		
Ostatní riešitelia	Celkový počet ostatných osôb	0
	Súhrnná kapacita ostatných osôb v osobomesiacoch	0
Spolu	Celkový počet zamestnancov	4
	Súhrnná kapacita zamestnancov v osobomesiacoch	76

B. Ciele, harmonogram a výstupy projektu

Anotácia projektu

Projekt "SmartMic" je európskym výskumným projektom zameraným na vývoj technológie schopnej očistiť priemyselnú odpadovú vodu pomocou kovového odpadu a následne zhodnocovať medziprodukty na keramické prášky s cieľom znížiť environmentálnu záťaž a recyklovať odpad na produkt.

Kľúčové slová

Odpadová voda, kovový odpad, recyklácia, zhodnocovanie odpadu, priemysel

Ciele projektu

Cieľom projektu je vyvinúť technologickú jednotku, ktorá zabezpečí sériu elektrochemických a hydraulických procesov potrebných pre transformáciu rozpustených organických nečistôt v odpadovej vode na vo vode nerozpustné a separované produkty.

Harmonogram riešenia projektu			
Názov etapy	Začiatok	Koniec	Celkové oprávnené náklady
WP1 - Development and integration	05/2021	12/2022	169 280 €
WP2 - Testing and verification	08/2022	06/2023	45 840 €
WP3 - Patenting	06/2021	10/2021	15 600 €
WP4 - Raw data pre-processing	06/2022	12/2022	33 480 €
WP5 - Big-Data processing via machine learning	07/2022	01/2023	30 600 €
WP6 - V&V of demonstrator	12/2022	06/2023	50 440 €
WP7 - Field testing of prototype	06/2023	10/2023	27 840 €
Spolu			**373 080 €**

Očakávané výstupy riešenia					
Kategória	Výstupy	Rok 2021	Rok 2022	Rok 2023	
Aplikované výsledky	Prototyp			1	
Publikácie			2	1	
Patentová prihláška		1			

C. Rozpočet projektu – národný grant				
Rozpočet projektu pre zodpovednú organizáciu (v eurách)				
Rok	**2021**	**2022**	**2023**	**Spolu**
Bežné priame náklady	74 158,93	96 781,87	89 123,20	260 064,00
Mzdové náklady	25 183,43	46 769,23	35 976,33	107 928,99
Zdravotné a sociálne poistenie	8 864,57	16 462,77	12 663,67	37 991,01
Cestovné výdavky	2 773,33	5 546,67	12 480,00	20 800,00
Materiál	10 240,00	7 680,00	7 680,00	25 600,00
Odpisy	0,00	0,00	0,00	0,00
Služby	27 097,60	20 323,20	20 323,20	67 744,00
Energie, vodné, stočné a komunikácie	0,00	0,00	0,00	0,00
Bežné nepriame náklady	0,00	0,00	0,00	0,00
Bežné náklady spolu	74 158,93	96 781,87	89 123,20	260 064,00
Kapitálové výdavky	38 400,00	0,00	0,00	38 400,00
Výška spolufinancovania projektu z prostriedkov MŠVVaŠ SR	112 558,93	96 781,87 €	89 123,20	298 464,00
Výška vlastných prostriedkov žiadateľa	28 139,73	24 195,47	22 280,80	74 616,00

C. Rozpočet projektu - vlastné prostriedky				
Rozpočet projektu pre zodpovednú organizáciu (v eurách)				
Rok	**2021**	**2022**	**2023**	**Spolu**
Bežné priame náklady	18 539,73	24 195,47	22 280,80	65 016,00
Mzdové náklady	6 295,86	11 692,31	8 994,08	26 982,25
Zdravotné a sociálne poistenie	2 216,14	4 115,69	3 165,92	9 497,75
Cestovné výdavky	693,33	1 386,67	3 120,00	5 200,00
Materiál	2 560,00	1 920,00	1 920,00	6 400,00
Odpisy	0,00	0,00	0,00	0,00
Služby	6 774,40	5 080,80	5 080,80	16 936,00
Energie, vodné, stočné a komunikácie	0,00	0,00	0,00	0,00
Bežné nepriame náklady	0,00	0,00	0,00	0,00
Bežné náklady spolu	18 539,73	24 195,47	22 280,80	65 016,00
Kapitálové výdavky	9 600,00	0,00	0,00	9 600,00

D.Čestné vyhlásenie štatutárneho zástupcu Zodpovedná organizácia

Ja, dole podpísaný štatutárny zástupca záväzne vyhlasujem, že:

- Všetky údaje obsiahnuté v dokumentácii projektu sú pravdivé
- Projekt bude realizovaný v zmysle predloženého obsahu
- Zodpovedná organizácia súhlasí s pravidelnou finančnou kontrolou projektu
- Zodpovedná organizácia bude archivovať všetky účtovné dokumenty súvisiace s realizáciou projektu v súlade s príslušnými právnymi predpismi.
- Dávam súhlas na výkon kontroly príslušným kontrolným orgánom MŠVVaŠ SR
- Zodpovedná organizácia bude dodržiavať legislatívu Európskej únie a platnú legislatívu SR

Som si vedomý možných následkov a sankcií, ktoré vyplývajú z uvedenia nepravdivých alebo neúplných údajov. Zaväzujem sa bezodkladne písomne informovať o všetkých zmenách, ktoré sa týkajú uvedených údajov a skutočností.

Podpis štatutárneho zástupcu príjemcu a pečiatka

.....

Dátum:

PRÍLOHA 2

EUROSTARS-2
Application Evaluation Result

eurostars™ Aim Higher

Thursday, 26 November 2020

Reference: 114774/24/Q

Dear Eurostars Applicants,

We are pleased to inform you that your Eurostars application, E!114774 SmartMic, has been positively evaluated by the Independent Evaluation Panel.

The ranking position and scores for each of the three evaluation criteria along with the thresholds are shown in the table below.

Ranking position	**192**	out of 600 eligible applications
BASIC ASSESSMENT		
Quality and efficiency of the implementation	140	
MARKET and COMMERCIALIZATION		
Impact	128	/200 - threshold set at 120 points (60 %)
INNOVATION and R&D		
Excellence	145	
Total score	413	/600 - threshold set at 402 points (67 %)
Quality Result	Above threshold	

This letter does not guarantee that your application will be approved or that you will receive funding. We will now:
> check to see whether each of the partners can receive public financial support from their respective National Funding Bodies,
> conduct an ethics screening on your application,
> send you the results of the ethics screening and funding availability within five weeks.

You may wish to contact your National Project Coordinator for further information. Their contact information can be found on our website: www.eurostars-eureka.eu

A copy of the evaluation reports is annexed to this letter.

Best regards,

Frans Verkaart, Chief Operating Officer, Eureka Association

Copied to: All Applicants as specified within the application form.
NPC: HUNGARY
NPC: SLOVAK REPUBLIC

Project Consortium Agreement

"SmartMic" PROJECT CONSORTIUM AGREEMENT (PCA)

Relating to the "SmartMic" Project

["SmartMic" **Project Acronym**] ["ACRONYM" Project Full Name **Smart recovery of scrap metals from wastewater to obtain high value metal-based ceramic micropowders**].

Under the "EUREKA-EUROSTARS-2" PROGRAM

Among:

1) **NOVO s.r.o.**, having its offices at Hlavná 106, 919 26 Zavar, Slovakia
   - Hereinafter referred to as "NOVO"
   - Represented for the signature of this Project Consortium Agreement by its authorized representative Dipl-Ing. Peter Novák MBA

2) **HOFITECH s.r.o.**, having its offices at Čukáraboň 7382/73, 929 01 Dunajská Streda, Slovakia
   - Hereinafter referred to as "HOFITECH"
   - Represented for the signature of this Project Consortium Agreement by its authorized representative RNDr. Gabriel Horváth, PhD.

3) **AQUAPROFIT Engineering, Consulting and Investment Co.**, having its headquarters at Krisztina Blvd. 32. 4th Floor, H-1013 Budapest, Hungary
   - Hereinafter referred to as "AQUAPROFIT"
   - Represented for the signature of this Project Consortium Agreement by its authorized representative Mr. Péter Udud

(Hereinafter together referred to as "the Parties")

Table of Contents

WHEREAS

1 In the framework of the "Horizont" PROGRAM, the Parties have submitted a proposal for a Project entitled: Smart recovery of scrap metals from wastewater to obtain high value metal-based ceramic micropowders, hereinafter referred to as "the Project";

2. The Project has been selected by the Technical Committee and has obtained a Label from the Board;

3. The Parties, who have acceded to or accepted the rules for "EUREKA-EUROSTARS-2" Projects as laid down in the "Horizont" Frame Agreement and the " Article 19 of the Horizon 2020 Regulation: Overview for "EUROSTARS-2" Project Proposers" wish to define in addition thereto certain of their rights and obligations inter se with respect to the carrying out of the Project.

Therefore, the Parties hereby agree as follows:

Article 1
DEFINITIONS

1.1 **Parties** mean the Parties signing this Cooperation Agreement and being "SmartMic" Projects' Participants.

1.2 **Coordinator** or Project Leader refers to NOVO s.r.o.

1.3 **Project** means the entire project as described in the work-plan referred to in *Annex A* to this Agreement.

1.4 **Project deliverables** means the reports referred to in *Annex B* of this Agreement as well as any element designated as such in *Annex A* to this Agreement.

1.5 **Cooperation agreement** or **Agreement** means this agreement including its annexes.

1.6 **Change of control** means any change in the control exercised over a Party. Such control may result in particular from:
- direct or indirect holding of a majority of the share capital of the Party or a majority of the voting rights of the latter's shareholders or associates, or
- direct or indirect holding in fact or in law of decision-making powers in the Party.

1.7 **Force Majeure** means any unforeseeable and insuperable event affecting the carrying out of the project by one or more Parties.

1.8 **Knowledge:** means the results, including information, whether or not they can be protected, arising from this project, as well as copyrights or rights pertaining to such results following applications for, or the issue of patents, designs, plant varieties, supplementary protection certificates or similar forms of protection.

1.9 **Pre-existing know-how:** means the information, which is held by the Parties prior to the conclusion of this Agreement, or acquired in parallel with it and necessary for carrying out the project, as well as copyrights or rights pertaining to such information

following applications for, or the issue of, patents, designs, plant varieties, supplementary protection certificates or similar forms of protection.

1.10 **Access rights**: means licenses and user rights to Knowledge or pre-existing know-how.

1.11 **Use**: means the direct or indirect utilization of Knowledge in research activities or for developing, creating and marketing a product or process or for creating and providing a service.

1.12 **Project Share** of a Party shall mean that Party's share of the total budgeted cost of the Project as shown in *Annex C*.

1.13 **Software terminology:**

(a) "API" or "Application Programming Interface" shall mean an interface or other means provided for by a Software application, component or library for the purpose of interfacing or interaction of other Software with such application, component or library.

(b) "Software" shall mean software programs, either in "Object Code", i.e. in machine-readable, compiled and/or executable form, or in "Source Code", i.e. in human readable form.

(c) "Software information" shall mean technical information used, or useful in, or relating to the design, development, use or maintenance of any version of a software program.

(d) "Software documentation" shall mean software information in documentary form.

1.13 **Dissemination:** means the disclosure of Knowledge by any appropriate means other than publication resulting from the formalities for protecting Knowledge.

1.14 **Subcontract**: means an agreement to provide services relating to tasks required for the project and which cannot be carried out by the Party itself, concluded between a Party and one or more subcontractors for the specific needs of the Project.

1.15 **Subcontractor**: means a third party carrying out minor tasks not relating to the core work of the Project, by means of a subcontract with one or more of the Parties.

1.16 **Contract**: means the agreement signed between a Party and its Public Authority, relating to the Project.

1.17 **Legitimate interest** means any interest, in particular of a commercial nature, of a Party which may be invoked in the cases provided for in this Agreement provided that the Party demonstrates that the damage to that interest is likely, given the circumstances, to cause a specific prejudice that is disproportionate, considering the objectives of the provision in respect of which it is invoked.

Unless the context otherwise requires, words and expressions defined in the "EUREKA-EUROSTARS-2" Frame Agreement and in the "REGULATIONS: Overview for "EUREKA-EUROSTARS-2" Project Proposers" have the respective meanings attributed to them when used in this Agreement.

Article 2
PURPOSE AND SCOPE OF THE PARTNERSHIP

2.1 This Agreement governs the rights and obligations of the Parties with respect with the partnership to be carried out for the "SmartMic" Project.

2.2 The scope of the Project is defined in the **Full Project Proposal**. The Full Project Proposal forms an integral part of this Agreement by reference only.

2.3 The Parties shall carry out the Project and their respective tasks under the Project in accordance with the conditions set out in the "Horizont" Frame Agreement, the "REGULATIONS : Overview for "EUREKA-EUROSTARS-2" Project Proposers" as well as in this Agreement.

2.4 Provisions may be added to this Agreement to expand or clarify other aspects, provided that none of them contradicts any of the provisions of the "**Horizont**" Frame Agreement, the "REGULATIONS: Overview for "**EUREKA-EUROSTARS-2**" Project Proposers" and this Agreement.

Article 3
COMING INTO FORCE - DURATION

3.1 This Agreement shall enter into force following its signature by all the Parties.

3.2 This Agreement shall thereafter remain into force for the duration of the Project which is estimated at 30.10.2023:
- Until the fulfilment or termination of the Project and at the latest on 31.12.2024 and complete discharge of all obligations of the Parties under the Contract and/or under this Agreement as well as any amendment or extension thereof; or
- Until this Agreement is terminated under any cases under *Article 10* below;
Whichever occurs first.

Article 4
PROJECT MANAGEMENT

4.1 The Parties shall establish, within thirty calendar days after the signature of this Agreement, a Project Co-ordination Committee (PCC) composed of one representative of each of them. Each representative shall have one vote and may appoint a substitute to attend and vote at any meeting of the PCC.

4.2 The PCC shall be chaired by the Co-ordinator being also denominated "Project Leader" in the "REGULATIONS: Overview for "Eureka-Eurostars 2" + Project Proposers".

The Co-ordinator shall convene meetings of the PCC at least once every four-month and shall also convene meetings at any time upon written request of any Party in case of an emergency situation.

The Co-ordinator shall give each of the Party at least fifteen-calendar day notice in writing of such meetings or seven-calendar day notice, in case of an emergency situation.

Any decision requiring a vote at a PCC meeting must be identified as such on the invitation.

Any decision required to be taken by the PCC may be taken in meetings via teleconference and/or via e-mail.

The Co-ordinator shall draft the minutes of each meeting to formalize in writing all decisions taken and shall dispatch them to all Parties without delay.

The minutes shall be considered as accepted by the other Parties if, within fifteen calendar-day from receipt thereof, none of them has objected in writing to the Co-ordinator.

4.3 The PCC shall be in charge of notably, in accordance with the rules laid down in the "Horizont" Frame Agreement and in the "REGULATIONS: Overview for "EUREKA-EUROSTARS-2" + Project Proposers":

(a) making proposals to the Parties for the review and/or amendment of terms of this Agreement;

(b) deciding to suspend all or part of the Project;

(c) in case of default of a Party, agreeing on actions to be taken against the Defaulting Party (as defined in *Article 10*), and making proposals to the other Parties to assign the Defaulting Party's tasks, and if appropriate to agree upon a new entity to join the Project for that purpose;

(d) deciding upon the entering into the Project of new Parties;

(e) deciding upon major changes in the tasks assigned to the Parties and more generally in the Project itself and insure full compliance with provisions of the "REGULATIONS: Overview for "EUREKA-EUROSTARS-2" Project Proposers" applicable in case of amendments of a Project

(f) deciding on technical roadmaps for the Project and prepare, under the responsibility of its Project Leader, the Technical Reports to be presented twice a year (according with the provisions of the "REGULATIONS: Overview for "Eureka-Eurostars 2" Project Proposers");

(g) reviewing the selection of additional expertise (subcontractors);

(h) without prejudice to the rules under Article 8, agreeing press releases and publications by the Parties.

The PCC, under the responsibility of its Project Leader, shall ensure that the present Project fully comply at all times with any rules laid down in the "Horizont" Frame Agreement and in the "REGULATIONS: Overview for "EUREKA-EUROSTARS-2" Project Proposers".

4.4 The decision-making process has been determined between the Parties and is as follows:

Each Party has 1 vote. In case of vote draw, PL should make decision.

1.5 All parties should respect ethical, safety and national regulations. Project Leader is entitled to make inspection accordingly norms prescribed in ethics documents

Article 5
EXECUTION OF THE CO-OPERATION - SUBCONTRACTING

5.1 Without prejudice to any other obligations under this Agreement, the Parties shall take all necessary measures to perform, fulfil, promptly and in due time all their obligations so that the Project is carried out in accordance with the terms and conditions of the "Horizont" Frame Agreement, the "REGULATIONS: Overview for "EUREKA-EUROSTARS-2" Project Proposers" , the Contract and this Agreement.

5.2 The Parties shall provide the Co-ordinator with the deliverables, information, and reports, as the Co-ordinator requires in order to perform its duties under the " Article 19 of the Horizon 2020 Regulation: Overview for "EUREKA-EUROSTARS-2" Project Proposers" and this Agreement, as well as under the Contract.

5.3 Each Party undertakes:

(a) to notify the Co-ordinator and each of the other Parties of any delay in performance or of any event that may impact the Project;

(b) to inform the Co-ordinator of relevant communications it receives from third parties in relation to the Project;

(c) to ensure the accuracy of any information or materials it supplies to the other Parties and to promptly correct any error therein of which it is notified. The recipient Party shall be responsible for the use to which it puts such information and materials;

(d) not to use knowingly any proprietary rights of a third party for which such Party has not acquired the corresponding right of use and/or to grant licenses;

(e) to act at all times in good faith and in a manner that reflects the good name, goodwill and reputation of the other Parties and in accordance with good business ethics;

(f) to participate in a co-operative manner to the meetings of the PCC under this Agreement.

5.4 The Parties shall ensure that the work to be performed, as identified in Annex A, can be carried out by them. However, where it is necessary to subcontract certain elements of the work to be carried out, this should be clearly identified in the Full Project Proposal. During the implementation of the Project, the Parties may subcontract other minor services, which do not represent core elements of the Project work, which cannot be directly assumed by them and where this proves necessary for the performance of their work under the Project.

Article 6
FINANCING

Each Party shall bear its own costs in connection with the carrying out of the Project, according to Annex C and to any decision of the PCC that can amend from time to time its Project Share, and will be solely responsible for its applications to obtain any subsidies therefore.

The Parties indeed recognize and agree that they are each responsible for the execution and financing of their contribution in the Project. In this regard, funding contracts, i.e. the "Contracts" are dealt with directly between each Party and its funding Public Authority

The Parties agree that each Contract negotiated by each Party shall fully comply with the terms of this Agreement, as well as with the rules of the "Horizont" Frame Agreement and the "REGULATIONS: Overview for "EUREKA-EUROSTARS-2" Project Proposers".

Article 7
CONFIDENTIALITY

7.1 During the term of the Project and for infinite time thereafter, the Parties shall treat as confidential any information which is disclosed during the term of this Agreement. The information need not to be marked as "confidential" by the disclosing Party to fall within the coverage of this Agreement.

Accordingly, each Party undertakes that:

(a) the receiving Party shall not use any such information for any purpose other than in accordance with the terms of this Agreement, and

(b) the receiving Party shall not disclose any such confidential information to any third party except with the disclosing Party's prior written consent, and

(c) such information shall neither be copied, nor otherwise reproduced nor duplicated in whole or in part where such copying, reproduction or duplication have not been specifically authorized in writing by the disclosing Party.

(d) the receiving Party shall return or destroy the confidential information received in any tangible form upon the first written request of the disclosing Party and to retain no copies or reproductions in whatever form. The receiving Party shall confirm that destruction to the requesting Party in writing. Ownership in all documents and/or other physical records or materials exchanged pursuant to this confidentiality undertaking shall remain with the disclosing Party.

(e) If the Receiving Party is required by law (pursuant to legal proceedings, subpoena, or other similar process) to disclose any confidential information, the receiving Party shall promptly notify the disclosing Party in writing and cooperate with the disclosing Party so the disclosing Party may seek a protective order or other appropriate remedy.

It shall be at the discretion of the disclosing Party as to which of its information may be disclosed under this confidentiality undertaking.

Disclosure of confidential information pursuant to this confidentiality undertaking in no case shall be construed as granting to the Receiving party, expressly or implicitly, any license, proprietary right, title or interest whatsoever with respect to the confidential information.

7.2 No obligation of confidentiality shall apply to any such information:

(a) has come into the public domain prior to, or after the disclosure thereof and in such case through no wrongful act of the receiving Party; or

(b) is already known to the receiving Party, as evidenced by written documentation in the files of the receiving Party; or

(c) has been lawfully received from a third party without restrictions or breach of this Agreement; or

(d) has been or is published without violation of this Agreement; or

(e) is independently developed in good faith by employees of the receiving Party who did not have access to the Confidential Information; or

7.3 The Parties shall impose the same obligations on their employees, who obtain knowledge of confidential information, as far as legally possible even for the time after the end or after the termination of employment.

7.4 The Parties shall also impose the same obligations on their Affiliates and subcontractors.

7.5 As well it is agreed and understood that the signature of a confidentiality agreement, in terms not less protective than the ones above, shall be a condition precedent to any third party to attend any meeting of the PCC.

7.6 Disclosure of information necessary because of the engagement of subcontractors, or for the application for patents, or other industrial property protection and in order to be able to develop or to manufacture and to have manufactured industrial products incorporating certain work results of this cooperation shall not constitute a breach of this Article.

7.7 Any parent company or affiliated company shall not be considered as third party provided such parent and/or affiliated company undertake to enter into obligations similar to the provisions of ***Articles 8, 9 and 10.***

7.8 The Parties agree to maintain in confidence any samples furnished by any of the other Parties under the program.

7.9 Any technical report, which includes the results, that is required to be submitted to a public financing Authority shall be submitted on the conditions of confidentiality at least to the extent imposed by such Authority.

7.10 The Agreement cancels and supersedes all prior understandings and undertakings of the Party relating to the Confidential Information exchanged or received in the framework of this Agreement pursuant to the Project.

Article 8
INTELLECTUAL PROPERTY RIGHTS

8.1 Ownership and protection of Knowledge

8.1.1 Parties starts projects with pre-existing know-how and information:

NOVO is the owner of knowhow in area of regulations and electric sources. The knowhow is not yet patented, patenting is the subject of the Smart Mic project. Relevant knowledge background necessary for smooth consortium cooperation will be exchanged during the project implementation.

HOFITECH is the owner of knowhow of the core-technology. The knowhow is not yet patented, patenting is the subject of the SmartMic project. Relevant knowledge background necessary for smooth consortium cooperation will be exchanged during the project implementation.

AQUAPROFIT is the owner of knowhow of the supporting and supply infrastructure of the technology. The knowhow is not yet patented, patenting is the subject of the SmartMic project. Relevant knowledge background necessary for smooth consortium cooperation will be exchanged during the project implementation.

HOFITECH will be responsible for conducting the patenting application.
NOVO and AQUAPROFIT will provide the information needed and will review the documents for the patent in relation with their responsibilities in the project.

During the application for the patent, the Parties shall determine the conditions and proportions of the provision and utilization of the patent in a separate agreement.

8.1.2 Knowledge shall be the property of the Party generating it.

8.1.3 Where the Knowledge Information is or incorporates or is intended to be or to incorporate a software technology, a software development or a software product, the Parties agree that each Party may take appropriate actions to protect Software Results developed by such Party under the Project by such rights as are available under such Party's national legal system including without limitation copyright or any other similar statutory right, and to protect such Software Results to the extent reasonably possible as proprietary information.

8.1.4 If, in the course of carrying out work on the Project, a joint invention, design or work is made (and at least two Parties are contributors), and if the features of such joint invention, design or work are such that it is not possible to separate them for the purpose of applying for, obtaining and/or maintaining in force the protection of the relevant intellectual property right, the Parties concerned agree that they may jointly apply to obtain and/or maintain the relevant rights and shall strive to set up amongst themselves appropriate agreements in order to do so as well as in order to determine utilisation' conditions of such joint invention by each Party to the appropriate separate agreement.

So long as any such rights are in force, the Parties concerned shall be entitled to use, without owing any financial compensation to or requiring the consent of the other Party concerned, and to license such rights, save as otherwise provided for in the appropriate separate agreement .

8.1.5 In the case where a Party ("Originator") would decide in its sole discretion that it does not intend to seek adequate and effective protection of certain of its Knowledge from the Project, then, the Originator shall inform in writing the other Parties, through the Coordinator, and any Party interested in applying to obtain and maintain such protection shall advise the other Parties, including the Originator, through the Coordinator and in writing within one month of receipt of relevant notice. In the absence of reaction of the other Parties, this Party undertakes to negotiate in good faith with the Originator any appropriate agreement in order to determine utilisation's conditions of such Knowledge between this Party and the Originator.

In case several Parties are interested in so applying, they shall strive to set up amongst themselves and with the Originator appropriate agreements in order to do so as well as in order to determine utilisation's conditions of such Knowledge by the interested Parties and the Originator.

The foregoing shall be without prejudice to the Access Rights of all Parties that will remain applicable in accordance with the Clause 8.4 on Access Rights and with the terms and conditions of any appropriate separate agreements negotiated between the interested Parties.

8.2 Publication of knowledge

8.2.1 A Party may not publish Knowledge generated by another Party or any Pre Existing Know How of such other Party, even if such Knowledge or Pre-Existing Know How is amalgamated with such Party's Knowledge, without the other Party's prior written approval.

For the avoidance of doubt, for the period of secrecy needed for a successful patent application, there cannot be any publication during such period without prior written approval of the Party owner of the Knowledge.

8.2.2 A Party shall provide the other Parties with a 30-day prior notice of any planned publication on its Knowledge and, if requested, with copy of relevant publication data. Adequate publication references shall be given in the publication.

Unless it has granted prior written publication approval, any Party may object to the publication within fifteen calendar days from receipt of the data, if it considers and can reasonably show that the protection of its own Knowledge could thereby be adversely affected.

Objection shall be made to the issuing Party, with a copy to all the other Parties. An objecting Party shall use its reasonable endeavours to make suggestions for modifications that would, if adopted, make the publication or communication possible.

8.3 Dissemination of Knowledge after the end of the Project

If dissemination of Knowledge does not adversely affect its protection or use and subject to legitimate interests, the Parties shall ensure further dissemination of their own Knowledge as provided under this Agreement.

8.4 Access Rights in the scope of the Project or outside the scope of the Project

8.4.1 Each Party shall take appropriate measures to ensure that it can grant Access Rights and fulfil the obligations under the Contract and this Agreement notwithstanding any rights of its employees, or any person it assigns or engages to perform its own task for the Project.

The Parties agree that Access Rights are granted on a non-exclusive and a non transferable basis.

The Parties also agree that, if not otherwise provided in this Agreement or granted by the owner of the Knowledge or Pre Existing Know-how in an appropriate separate agreement, the Access Rights shall not include the right to grant sub-licenses, except for the Affiliates.

8.4.2 **Access Rights in the scope of the Project:** The Parties agree that the Access Rights on the Pre-Existing Know-How and on the Knowledge needed for carrying out the Project shall be granted on a royalty-free basis only for the purpose of the carrying out of the Project.

8.4.3 **Access Rights out of the scope of the Project for use of a Party's own Knowledge:** the Party holding the Knowledge (and/or Pre-Existing Know-How) undertakes to negotiate in good faith with another Party, any appropriate separate agreement to organise Access Rights' conditions of the latter to its Knowledge (and Pre-Existing Know-How)

- Save as otherwise provided for in this Agreement or in a separate agreement between the interested Parties, the Parties agree that the Access Rights on the Pre-Existing Know-How needed for Use of a Party's own Knowledge shall be granted on fair and non-discriminatory market conditions. In any case, the Party holding the Pre-Existing Know-How undertakes to negotiate any access rights to its Pre-Existing Know-How and associated intellectual property rights, at conditions at least equivalent to the most favourable conditions negotiated with other partners and or co-contractors. These conditions can be negotiated in a separate agreement.

- Save as otherwise provided for in this Agreement or in a separate agreement between the interested Parties, the Parties agree that the Access Rights on the Knowledge needed for Use of another Party's own Knowledge shall be negotiated in good faith, at conditions at least equivalent to the most favourable conditions negotiated by the Party holding the Knowledge with other partners and or co-contractors. These conditions can be negotiated in a separate agreement.

8.4.4 Should a Party reasonably believe that, without Access Rights on another Party's Pre-Existing Know-How or Knowledge, the performance of its own task for the Project or the Use of its own Knowledge resulting from the Project would be technically impossible or significantly delayed, such Party shall then promptly request in writing Access Rights from said other Party, identify the extent of the Access Rights and provide reasonable evidence on its needs. Any Party undertakes to negotiate in good faith the Access Rights' conditions of any other Party requesting Access Rights, in the abovementioned scopes.

8.5 Affiliates Access Rights

Each Party hereby grants Access Rights to all Affiliates of the Parties as if such Affiliates were parties hereto, provided that such Affiliates fulfil all confidentiality and other obligations of the Parties under the Contract and this Agreement.

Upon a company not being an Affiliated Company of a Party to this Agreement, as per the definition of Affiliated Company of the "REGULATIONS : Overview for "SmartMic" Project Proposers" :

- All Access Rights granted to such Affiliate in respect of Knowledge or Pre-existing Know-How shall lapse, provided however that, except as otherwise agreed by the relevant Parties, any Knowledge which has been incorporated into the products or services of said Affiliate or which has been amalgamated with said Affiliate's own information may continue to be used (exclusively in the manner it was used upon such date) by said Affiliate under a non exclusive license agreement to be negotiated with the relevant Party(ies), upon such ex Affiliate's written request, provided however that no Legitimate Interests of such Party(ies) oppose the grant of such licenses.

- All Access Rights granted by such Affiliate hereunder shall continue in full force and effect.

8.6 Software

8.6.1 The Parties agree that Access Rights (under all the rules herein defined) when applying to Software do not comprise access to Source Code but only to Object Code, unless otherwise expressly provided herein below.

8.6.2 For Software, which is either Pre-Existing Know-How or Knowledge, the Parties also agree that they shall have Limited Source Code Access for carrying out their tasks under the Project but they shall not have any access to Source Code for Use.

8.6.3 Limited Source Code Access shall mean Source Code access (i.e. access to Source Code (as available from the Contractor granting such access) and also to Software Documentation), provided in any case that an API including Software Documentation for the respective Software is not available; and also that use of the Software in Object Code form alone is not meaningful.

Article 9
WARRANTY / LIABILITY

9.1 No Party shall be responsible to another for indirect or consequential loss or damages such as but not limited to loss of profit, revenue or loss of contracts.

9.2 Each Party shall be solely liable for any loss incurred by, or damage or injury to third parties resulting from the implementation by such Party of the Project, in accordance with any applicable law.

9.3 Each Party shall remain fully responsible for the performance of any part of its Work Package, or for the performance of its obligations by any Subcontractor.

Therefore said Party shall ensure that (a) such subcontracts fully comply with the requirements of the "Horizont 2020" Frame Agreement, the "REGULATIONS: Overview for "EUREKA-EUROSTARS-2" Project Proposers" as well as with requirements of this Agreement; (b) the other Parties' Access Rights (as described in Clause 8.4 of the present Agreement) are fully preserved; and (c) the third party shall have no access to any other Party's Knowledge or Pre-Existing Know-How without the latter's prior written consent and that such subcontracts fully comply in any case with the present Agreement and appropriate separate agreement(s) negotiated by said Party for Access Rights to any other Party's Knowledge or Pre-Existing Know-How.

9.4 Subject to cases of *force majeure* and to any applicable legislation, the Parties shall use reasonable endeavours to achieve the results aimed at by the "SmartMic" Project.

9.5 In any case, each Party obtaining necessary financing from its funding Public Authority, shall be individually and solely liable towards the Association for the payment of its Project Fees, as fully described in clause 9 of the "REGULATIONS: Overview for "EUREKA-EUROSTARS-2" Project Proposers".

Article 10
TERMINATION – RIGHT TO WITHDRAW

10.1 This Agreement expires automatically with the fulfilment or termination of the Project and complete discharge of all obligations of the Parties under the Contract and/or this Agreement.

10.2 This Agreement shall automatically terminate without any further demand and without liability of any Party to the others upon the first to occur of the following events:
(a) No label awarded to the Project;
(b) Cancellation of the Project;
(c) Should any Party enter into bankruptcy or liquidation, if the other Parties decide, subject to approval by the Board, to terminate the Project.

10.3 In the event of a breach by a Party ("the Defaulting Party") of its obligations under this Agreement or the Contract which is irremediable or which is not remedied within sixty calendar days of a written notice from the Co-ordinator requiring that such breach be remedied, then the other Parties may jointly decide to terminate this Agreement with respect to the Defaulting Party following a minimum thirty calendar day prior written notice by the Co-ordinator.

10.4 Such termination shall take place with respect to the Defaulting Party, who shall be deemed to have agreed to the termination of this Agreement in respect of its participation therein, provided always that:

a) the tasks of the Defaulting Party shall be assigned to one or several companies and/or entities which are chosen by the other Parties and which agree to be bound by the terms of Agreement. The preference shall be granted to one or more of the remaining Parties;

b) the Defaulting Party shall:
   (i) assume all reasonable direct cost increase (if any) resulting from the assignment referred to in a) above in comparison with the costs of the tasks of the Defaulting Party as specified in Annex C and
   (ii) be liable for any so resulting additional direct cost incurred by the other Parties, up to a total amount which shall not exceed the Defaulting Party's Project Share, and any excess amount shall be shared between the Parties (including the Defaulting Party) pro rata to their Project Shares at the time of exclusion of the Defaulting Party.

10.5 The provisions of Article 10.4 shall also apply in the events that:

(a) any Party's participation in the Project is terminated by the Board, without prejudice to any other rights of the other Parties;

(b) any Party enters into bankruptcy or liquidation and the other Parties decide to terminate this Agreement with respect to that Party and to take over the fulfilment of such Party's obligations.

(c) A Party is entitled to withdraw from the Project or to otherwise request the termination of its participation in the Project having obtained the prior written consent of the other Parties (such consent not to be unreasonably withheld).

(d) After the entry into force of this Agreement any third party would acquire, directly or indirectly, the ownership or control of more than 50% of the voting shares of a Party of this Agreement, the other Parties may unanimously decide to terminate this Agreement with respect to such Party, the provisions of *Article 10.4* being correspondingly applicable to such Party with the exception of *Article 10.4 c)*.

Such decision must be taken within sixty calendar days from the date such take-over has been made public. If the other Parties would not agree *unanimously* to such termination as aforesaid, any Party or Parties may withdraw from this Agreement.

10.6 In case of takeover of any Party's tasks all rights and obligations under the Contract and this Agreement shall in good faith be redistributed among the remaining Parties.

10.7 Neither Party shall by reason of withdrawal or termination be relieved from:

(a) its responsibilities under this Agreement or the Contract in respect of that part of that Party's tasks which has been carried out (or which should have been carried out) up to the date of withdrawal or termination; or
(b) any of its obligations or liabilities arising out of such withdrawal or termination.

10.8 The provisions of the Articles of this Agreement relating to liability, confidentiality, intellectual property rights and publications shall survive the term or termination of this Agreement for any reason whatsoever to the extent needed to enable the Parties to pursue the remedies and benefits provided for in those Articles.

For the avoidance of doubt, termination or withdrawal shall not affect any rights or obligations incurred prior to the date of the termination.

Article 11
FORCE MAJEURE

11.1 Force Majeure shall mean any act, event or condition beyond the reasonable control of a Party that was not reasonably foreseeable at the time of execution of this Agreement and is not avoidable under normal circumstances, including but not limited to acts of God, war, riots, acts of Government or any state or political subdivision thereof, fires, floods, explosions of other catastrophes, labour disturbances, freight embargoes or material shortages.

11.2 No Party shall be liable for any failure to perform or any delay in performing any of its obligations under this Agreement if such failure or delay arises out of Force Majeure. The Party facing an event of Force Majeure shall promptly notify the other Parties and shall use its reasonable endeavours to remedy any default or delay occasioned thereby forthwith upon such event ceasing to apply.

11.3 In case of frustration of this Agreement or if the fulfilment of substantial provisions of this Agreement is affected by Force Majeure, the Parties shall endeavour to adapt the Agreement to the new situation. In the event that the Parties do not agree upon such an adaptation within a period of three months, the Agreement shall, as far as such Party is concerned, be terminated without notice by the Party that cannot reasonably be expected to fulfil the Agreement.

Article 12
INSURANCE

Each Party undertakes to enter into all necessary insurance policies in order to cover all risks (including environmental risks) arising out of the performance of the tasks allocated to it pursuant to Annex A and/or B (or any decision of the PCC).

Article 13
LANGUAGE

This Agreement is drawn up in English which language shall govern all documents, notices and meetings for its application and/or extension or in any other way relative thereto together with all reports, communications, correspondence and technical work between the Parties shall be in English.

Article 14
NOTICES

Any notice to be given under this Agreement shall require documents duly signed and personally delivered or delivered by mail. They shall be addressed to the attention of the following recipients of the Parties or to such other address and recipient as a Party may designate in respect of that Party by written notice to the other Parties:

- NOVO s.r.o. nominates as contact for technical, administrative and finantial matters Dipl.-Ing. Peter Novák MBA
(e-mail: peter.novak@novo.sk, mobile: +421 903 472 151)

- HOFITECH ltd. nominates as contact for technical matters RNDr. Gabriel Horváth, PhD.
(e-mail: horvath@hofitech.com, mobile: +421 905 140 109)

- AQUAPROFIT nominates as contact for technical, administrative and financial matters Attila Korcsog and Ferenc Szép
(e-mail: attila.korcsog@aquaprofit.com, mobile: +36 30 709 9310)
(e-mail: ferenc.szep@aquaprofit.com, mobile: +36 30 456 3190)

Article 15
ANNEXES, CONFLICTS AND INCONSISTENCIES

The Annexes to this Agreement, which are an integral part thereof, are:

Annex A (Project Work-plan)
Annex B (Project Deliverables)
Annex C (Project Costs Breakdown)

In the event of conflict or inconsistency between any provision contained in the body of this Agreement and any provision contained in its Annexes, the provisions contained in this Agreement shall prevail.

Article 16
ASSIGNMENTS - AMENDMENTS

15.1 Any rights or obligations of the Parties arising from this Agreement may not be assigned or transferred in all or in part to any third party without the other Parties' prior written approval and such consent shall not be unreasonably withheld if to an Affiliate of the assigning Party.

15.2 All amendments and modifications to this Agreement require documents duly signed by all Parties.

Article 17
SEVERABILITY

Should any provision of this Agreement prove to be invalid or incapable of fulfilment, or subsequently become invalid or incapable of fulfilment, whether in whole or in part, this shall not affect the validity of the remaining provisions of this Agreement. In such a case, the Parties shall be entitled to demand that a valid and practicable provision be negotiated which most nearly fulfils the purpose of the invalid or impracticable provision.

Article 18
RESTRICTIONS

The activities contemplated by this Agreement are subject to any mandatory rules or regulations that may be applicable in the countries in which the Parties' activities occur. Nothing in this Agreement shall be deemed to be an agreement to violate such rules or regulations. To the extent any such rules or regulations forbid or restrict any of the activities contemplated hereunder, the Parties agree, subject to Article 16, that this Agreement shall not obligate either Party to conduct such activity.

Article 19
APPLICABLE LAW

This Consortium Agreement shall be construed according to and governed by the law of Slovak Republic.

Article 20
SETTLEMENT OF DISPUTES

19.1 In case of dispute or difference between two or among several Parties arising out of or in connection with this Agreement, the Parties shall first endeavour to settle it amicably.

19.2 All disputes or differences arising in connection with this Agreement, which cannot be settled amicably, shall be subject to the jurisdiction of the appropriate national court of the Party who would be the prospective defendant in legal action on the issue

19.3 If the Arbitrators are not appointed within thirty calendar-days from the request for arbitration by a disputing Party, either disputing Party may ask the International Chamber of Commerce for the appointment of the Arbitrators.

19.4 The award of the Arbitrator will be final and binding upon the Parties concerned. The Arbitrator shall determine by whom and to whom the costs of arbitration shall be paid.

Article 21
OTHERS

HOFITECH will own the wastewater treatment and the waste-to-product technology, i.e. the sludge-to-ceramic powder production technology and the support and feeding infrastructure, the latter being developed by AQUAPROFIT based on their know-how. NOVO will own the optical-electrical online water quality monitoring system and power source.

The Parties have agreed that the commercialization of the system will be joint since it will be developed in a way that the modules must be used together in order to obtain their best performance. The Parties agree that they may jointly set up amongst themselves appropriate agreements in order to determine utilisation conditions of such joint invention.

IN WITNESS WHEREOF, the Parties have executed this Agreement in 5 original copies.

Authorised to sign on behalf of **NOVO s.r.o.**

By (signature):

Name (block letters):

Title: CEO

Date: 23.2.2021

Authorised to sign on behalf of **HOFITECH s.r.o.**

By (signature):

Name (block letters):

Title: CEO (Mr.)

Date: 23.2.2021

Authorised to sign on behalf of **AQUAPROFIT Engineering, Consulting and Investment Co.**

By (signature):

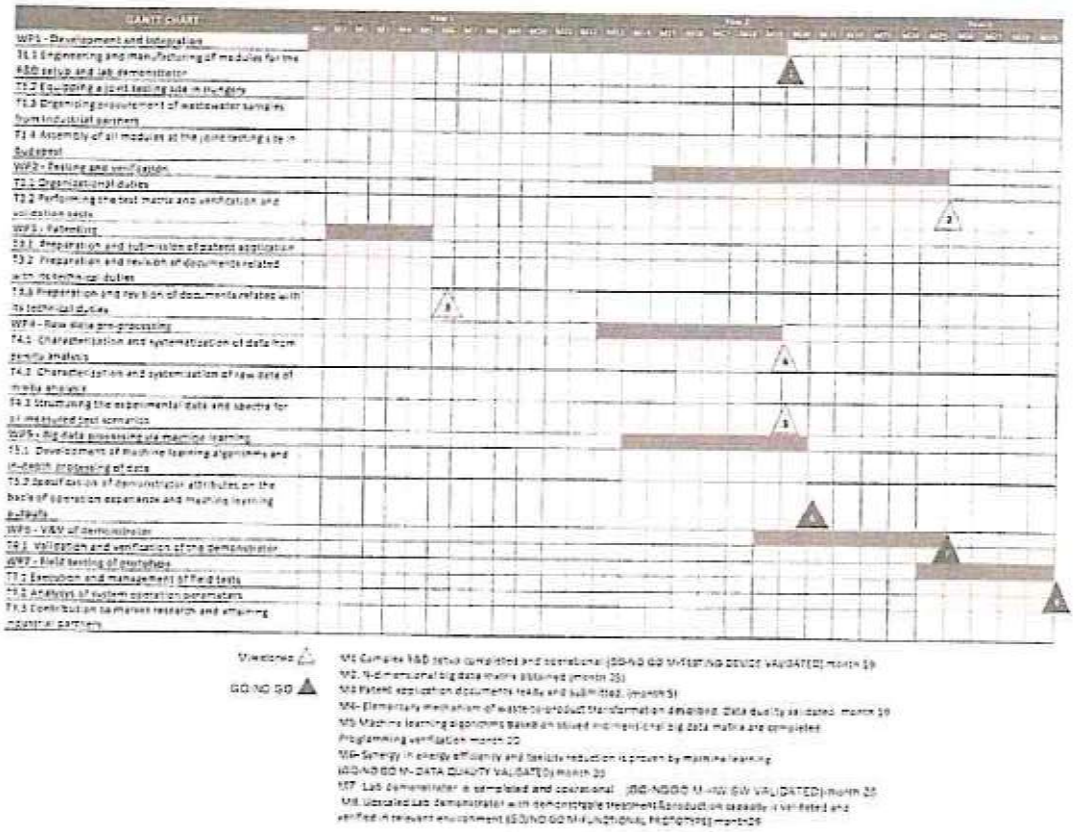
Name (block letters): [illegible]

Title: CEO

Date: 17.02.2021

ANNEX A
Project Work-plan

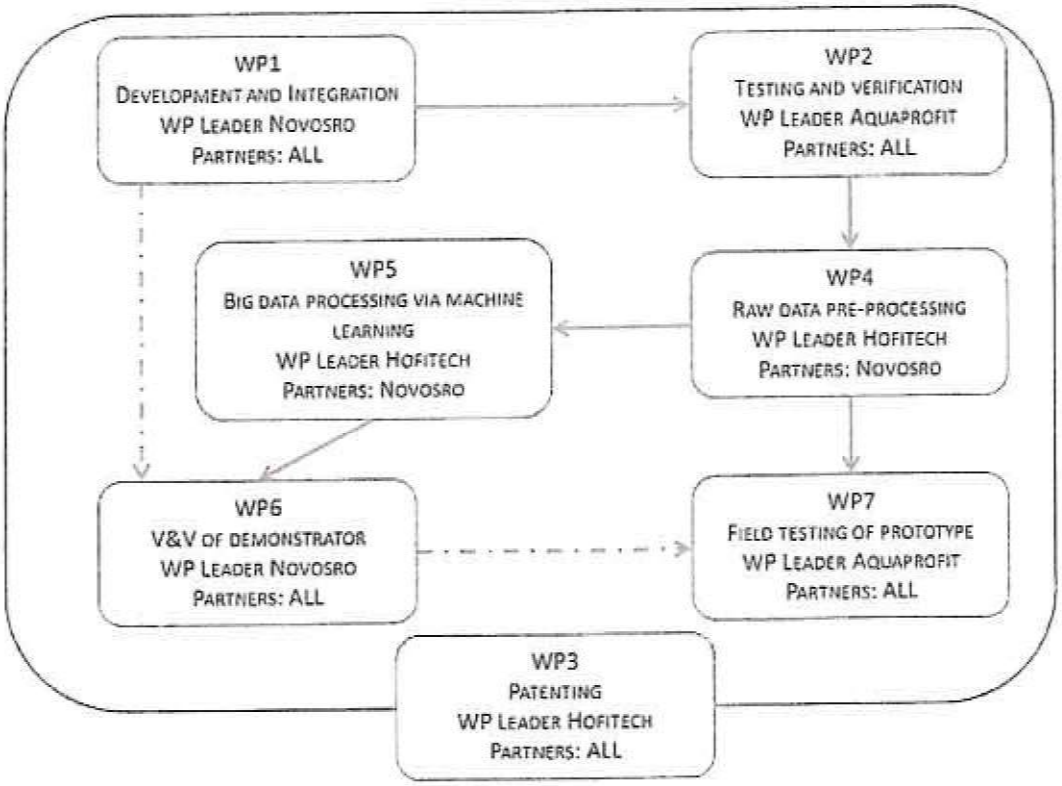
Project work should be organized in accordance with overview of E114774 – SmartMic project.



"SmartMic"

ANNEX B

Project Deliverables - Work Packages



List of WP1-7

WORKPACKAGE 1	
WP WORK PACKAGE NAME	DEVELOPMENT AND INTEGRATION

WP WORK PACKAGE SUMMARY (4.000 characters)

Describe its objectives, explain the technical approach to the work, clearly state the starting point and expected results. What is the relationship between this work package and any preceding or subsequent ones?

A basis for development of a downscaled automatized low capacity waste-to-product prototype infrastructure will be established. HOFITECH will rent laboratory premises to extend the available workspace for accommodating the newly assembled setups and instrumentation in cooperation with NOVOSRO. The first 3 months are therefore dedicated to project preparation, equipping the new laboratory, running CFD (computer fluid dynamics) simulations for the elementary hydraulic and electrical parts of our technology by our subcontractor CompEn.

After receiving simulation and calculation data, there will be extensive information exchange among the consortium partners in order to:

- Visualize the system design on process flow chart and P&ID Diagram with NOVOSRO
- Recommend and finalize drawings, 3D model, hydraulic and electrical connection schemes
- Define Bill of Materials (BOM) for components of the 1-chamber prototype and lab-scale support infrastructure
- Identify potential suppliers of required materials, for the manufacturing of the downscaled 1-chamber prototype, following the Best Value for Money principle
- and finally manufacture/assembly of components and spare parts in cooperation with AQUAPROFIT

Basic System design favouring simplified construction features and maximum flexibility of setup will be created, based on HOFITECH's and NOVOSRO's knowhow and laboratory experience with the technology and AQUAPROFIT's industrial knowledge. AQUAPROFIT will contribute with their consultancy expertise for power supply choice and for setting up a basic control & measurement system.

The assembly of the downscaled prototype then allows to map and verify the working window of major deterministic electrochemical and hydrodynamic processes and parameters of the 1-chamber prototype, where special focus will be on the separation of metallized sludge and the intensification of its production. Performing a deep economic analysis and the widely used Box-Behnken method our technology will be optimized to achieve competitive cost- and capacity efficiency in lab-scale condition.

The collected sludge inside the prototype will be separated manually at the beginning. However, a design of an automated sludge separation subsystem for 1-chamber prototype will also run parallelly, followed by its manufacture. The main technological parameters of wastewater-scrap metal to sludge subsystem and sludge-to-powder subsystem will therefore be identified in the automated version of the 1-chamber lab prototype for the purpose of upscaling during the WP2 phase.

Different wastewater samples will be collected from relevant industrial partners to map and extend the working parameters of our technology for achieving a wide scale application feature. Hence, a requirements analysis will be conducted. The communication channels between consortium partners and wastewater sample suppliers will provide periodical feedback for improving our development and technology performance. This approach will specify the customer/market requirements to obtain major functional- and performance parameters for the

technology upscaling of high capacity demonstrator prototype in the next workpackage WP2. The technology scale-up assembly will feature several interconnected functional units.

W5. WORK PACKAGE START TIME The project starts at month 'zero' (project time elapsed = 0). After 4 weeks, the project time elapsed is = 1. After 24 weeks, the project has been running for 5 months 2 weeks (=5.5).	**ZERO**
W6. DURATION OF WORK PACKAGE (# of months)	**20 MONTHS**

W7. MILESTONES AND OUTCOMES (2.000 characters)

Describe the milestones and outcomes. State clearly what type of outcome is expected (document/blueprint/software/system/hardware/...) as well as when you expect to have completed it.

For each you should:

› Identify their place in the critical path of the overall project.

› Indicate if it is a Go/No-go decision point – it may be that any failure cannot be overcome and the project may naturally come to a conclusion.

WP1 M1 Complex R&D setup completed and operational (GO-NO GO M-TESTING DEVICE VALIDATED) M19. **D1.1: Report on modules** (M4) - Comprehensive report on all developed sub-technology modules, design documentations, 2D and 3D technical drawings and P&ID for the complex R&D setup **D1.2: Completed complex R&D setup** (M10) - Developed, integrating all required modules: • Electrochemical reactor module for wastewater transformation using flat machined metal consumables • Optical module coupled with industrial in-situ FTIR monitoring for monitoring electrochemistry of wastewater transformation • Assembled and integrated modules into one complex R&D setup at the joint testing site in Hungary **D1.3: Data management interface** - Online data management interface with remote data collection and remote control of sub-technology modules (M3) **D1.4: Lab demonstrator design (M4)** - Technical documentation of the lab demonstrator. **D1.5: Lab demonstrator assembly (M19)** - Assembled lab demonstrator on the joint testing site in Hungary ready for Validation & Verification procedures
WP TASKS (10.000 characters) You are now required to present a list of the tasks being undertaken within each work package. Describe the role, the activities and the responsibilities of each organization in each of these work packages. You should produce a list of tasks using the following template: › Task reference (WP1, task 1...) › Identify the organization performing the task (use the shortened names provided in P1). › Provide a general description of the task/activities.
T1.1 Engineering and manufacturing of modules for the R&D setup and lab demonstrator (M0-M4), (M14-M19) L:HOFITECH, C:NOVO • Electrochemical reactor module for wastewater transformation using flat metal consumables; Industrial in-situ FTIR analyser for water quality monitoring (M0-M4) • Module for in-situ measuring of COD, BOD and TOC parameters of water; (M0-M4) • Establishing a data management interface for big data management and remote access/control with particular modules; (M0-M2) • Optimizing sizes of the optical spectrum data for data processing in neural networks; (M9-M10) • Upgrade of the logging and analysing infrastructure consisting of developed inline monitoring modules • Design and manufacturing of a digital-analogue converter unit for control & logging of modules within a lab demonstrator (M0-M4) **T1.2:** Equipping a joint testing site in Hungary where all modules will be integrated in one complex R&D setup. (M0-M4) , L:AQP, C:NOVO **T1.3:** Organizing procurement of wastewater samples from industrial partners and their periodical transportation in terms of legislation. (M0-M4), L:AQP, C:HOFITECH **T1.4:** Assembly of all modules at the joint testing site in Budapest. (M4-M6) and (M16-M19) Transportation of modules to Hungary from Slovakia (M4), (M19) Assembly of all improved and newly developed modules on the joint testing site (M4-M6), (M16-M19) L:NOVO, C:HOFITECH, AQP

WORKPACKAGE 2	
W3. WORK PACKAGE NAME (100 characters)	Testing and verification
W4. WORK PACKAGE SUMMARY (4.000 characters) Describe its objectives, explain the technical approach to the work, clearly state the starting point and expected results. What is the relationship between this work package and any preceding or subsequent ones?	
Objective is the acquisition and collection of raw data from optical, and physical measurements in 3900 individual test scenarios (the combinations of parameters) coupled with complementary chemical and material parameters into an n-dimensional big data matrix with defined formal and structural requirements. This big data matrix needs high quality data processing to be eligible for further in-depth machine learning procedures and numerical simulations of elementary electrochemical, hydrodynamic and thermodynamic processes WP3 is dedicated to intense testing activities on the developed complex R&D setup from WP2. The time evolution of spectroscopic, chemical and physical parameters of each of the 3900 test scenarios defined in the test matrix will be recorded to build big data about the cold plasma state, the treated water and the produced micropowders. Micropowders will be further analysed by ex-situ FTIR, SEM techniques. On-site physical parameters will be acquired in real-time at a rate up to 10 samples/second, .	
W5. WORK PACKAGE START TIME The project starts at month 'zero' (project time elapsed = 0). After 4 weeks, the project time elapsed is = 1. After 24 weeks, the project has been running for 5 months 2 weeks (=5.5).	15
W6. DURATION OF WORK PACKAGE (# of months)	11 MONTHS
W7. MILESTONES AND OUTCOMES (2.000 characters) Describe the milestones and outcomes. State clearly what type of outcome is expected (document/blueprint/software/system/hardware/...) as well as when you expect to have completed it. For each you should: › Identify their place in the critical path of the overall project. › Indicate if it is a Go/No-go decision point – it may be that any failure cannot be overcome, and the project may naturally come to a conclusion.	
M2. N-dimensional big data matrix obtained (M25) **D2.1: Report on transport rules (M14)** - Report setting the rules of the safe samples transport and the time and conditions of the storage to preserve the stability of sample properties until the analyses • Report on spectral collection and identification of water composition (M16) **D2.2: Report on powder production (M18)** - Report about spectral collection and identification of powder composition and morphology **D2.3: Activity diary (M19)** – Cumulative report on the performed R&D tests and spent effort	
W8. TASKS (10.000 characters) You are now required to present a list of the tasks being undertaken within each work package. Describe the role, the activities and the responsibilities of each organization in each of these work packages. You should produce a list of tasks using the following template: › Task reference (WP1, task 1...)	

› Identify the organization performing the task (use the shortened names provided in P1). › Provide a general description of the task/activities.
T2.1: Organizational duties (M10-M25) *L: AQP, C: HOFITECH, NOVO* • Organizing group trainings with involved members for synchronizing and maintaining all modules and the complex R&D setup in Hungary (M10 • Transport of produced micropowders in terms of test matrix and agreements (M11-M15) • Ensuring optimal operational conditions of the joint testing site (M10-M18) **T2.2:** Performing the test matrix and verification and validation tests. (M10-M25) Coordination of agreed experimental rounds for the individual test scenarios (M11-M26), L: *AQP*, C: NOVO, HOFITECH • Measurement of time-evolution of in-situ FTIR spectra of wastewater effluent at different test scenarios (M10-M25) • Ex-situ analysis of micropowders by SEM and FTIR methods (M10-M25) • Recording the time evolution of in-situ FTIR monitoring of treated water for every defined combination of controlled parameters and sending the data to a joined data exchange server for processing (M10-M25) • Recording the time evolution of in-situ COD, BOD, TOC and energy consumption parameters of treated water for every testing scenario and sending the data to a joined data exchange server for processing (M10-M25)

WORKPACKAGE 3	
WP. WORK PACKAGE NAME (100 characters)	Patenting
WP. WORK PACKAGE SUMMARY (4.000 characters) Describe its objectives, explain the technical approach to the work, clearly state the starting point and expected results. What is the relationship between this work package and any preceding or subsequent ones?	
It is the objective of this work package to ensure the intellectual protection of SmartMic, which will be done according to the process: (i) Performance of technology watch over our patented technology; (ii) Perform Freedom-to-Operate analysis over new technological components implemented in SmartMic, and ensure that no IPR pose a barrier for the commercialization of our system; (iii) Redaction of documents and filing applications of patents or any other tool for intellectual protection (iv) Guard that throughout the commercialization activities no confidential information is disclosed to third parties without first signing a Non-Disclosure Agreement (NDA).	
WP. WORK PACKAGE START TIME The project starts at month 'zero' (project time elapsed = 0). After 4 weeks, the project time elapsed is = 1. After 24 weeks, the project has been running for 5 months 2 weeks (=5.5).	1
WP. DURATION OF WORK PACKAGE (# of months)	5 MONTHS
WP. MILESTONES AND OUTCOMES (2.000 characters) Describe the milestones and outcomes. State clearly what type of outcome is expected (document/blueprint/software/system/hardware/...) as well as when you expect to have completed it. For each you should: › Identify their place in the critical path of the overall project. › Indicate if it is a Go/No-go decision point – it may be that any failure cannot be overcome, and the project may naturally come to a conclusion.	
M3 Patent application documents ready and submitted. (month 5) D3.1 DOCUMENT- MONTH 3 Patent is ready D3.2 DOCUMENT- MONTH 5 Submitted patent application	
WP. TASKS (10.000 characters) You are now required to present a list of the tasks being undertaken within each work package. Describe the role, the activities and the responsibilities of each organization in each of these work packages. You should produce a list of tasks using the following template: › Task reference (WP1, task 1...) › Identify the organization performing the task (use the shortened names provided in P1). › Provide a general description of the task/activities.	

WP3. T1. HOFITECH Preparation and submission of patent application. (M1 – M5) **L:HOFITECH**

To robustly protect our IP rights and guarantee commercialization with minimal risks, the final design of the Innovwaste System and its components will be further patented if suitable in national, and then European level. Initial patent will be also extended at an international level. In addition, other available resources such as trademark or copyright, will be also used to assure our systems can be safely commercialized in different regions. HOFITECH will
- Lead the filling of the corresponding patent documents with regards to its own technology and the overall system.
- Conduct the patent application.

WP3.T2. NOVOSRO Preparation and revision of documents related with its technical duties in the patent of the system. (M1 – M5) L:NOVO

NOVOSRO will provide the information needed and will review the documents for the patent in relation with their responsibilities in the project in order to comply with the IP agreement (ongoing) set in the Consortium Agreement: the use of optical and electrical monitoring of the treated water, micro metal-oxides and metal carbides particles

WP3.T3. AQUAPROFIT Preparation and revision of documents related with its technical duties in the patent of the system. (M1 – M5) L: AQP

AQUAPROFIT will provide the information needed and will review the documents for the patent in relation with their responsibilities in the project in order to comply with the IP agreement (ongoing) set in the Consortium Agreement: the implementation of the components in a modular equipment and the studies with CFD to make the system hydraulically efficient, fulfilling industrial standards.

WORKPACKAGE 4	
W3. WORK PACKAGE NAME (100 characters)	Raw data pre-processing
W4. WORK PACKAGE SUMMARY (4.000 characters) Describe its objectives, explain the technical approach to the work, clearly state the starting point and expected results. What is the relationship between this work package and any preceding or subsequent ones?	
The purpose of this work package is Collecting, pre-processing and systemization of chemical, physical, and optical raw data to identify fundamental chemo-physical mechanisms driving wastewater-to-product transformation. Systemization of raw data acquired during WP2 and completion of the development of customized analytical techniques. All the recorded and measured raw data from the test scenarios must be properly structured into an n-dimensional big data matrix as a required input to numerical simulations and data science procedures of WP5.	
W5. WORK PACKAGE START TIME The project starts at month 'zero' (project time elapsed = 0). After 4 weeks, the project time elapsed is = 1. After 24 weeks, the project has been running for 5 months 2 weeks (=5.5).	13
W6. DURATION OF WORK PACKAGE (# of months)	7 MONTHS
W7. MILESTONES AND OUTCOMES (2.000 characters) Describe the milestones and outcomes. State clearly what type of outcome is expected (document/blueprint/software/system/hardware/...) as well as when you expect to have completed it. For each you should: › Identify their place in the critical path of the overall project. › Indicate if it is a Go/No-go decision point – it may be that any failure cannot be overcome and the project may naturally come to a conclusion.	
WP4. M4- Elementary mechanism of waste-to-product transformation described. Data quality validated. M19 **D4.1. Report of raw data pre-processing (M18)** • List of identified constituents of treated water at individual test scenarios in terms of reduced test matrix • Results of material characterization of micropowders synthesized at different stages and with different treatment parameters • Report on the presence and concentration of the composition of water samples for all test scenarios • Report of the identified composition of cold plasma gases injected into the water bulk inducing additional electrochemistry in all test scenarios **D4.2. Report on data matrix systematization (M19)** – Reporting all pre-processed and characterized chemical, optical and physical raw data in an n-dimensional big data matrix	
W8. TASKS (10.000 characters) You are now required to present a list of the tasks being undertaken within each work package. Describe the role, the activities and the responsibilities of each organization in each of these work packages. You should produce a list of tasks using the following template: › Task reference (WP1, task 1...) › Identify the organization performing the task (use the shortened names provided in P1).	

› Provide a general description of the task/activities.
T4.1. Characterization and systematization of data from ex-situ analysis (M13-M19) Systematization of pre-processed chemical analytical data of treated water into an n-dimensional big data matrix suitable for machine learning and numerical simulations in WP5. (M13-M19) L:HOFITECH • Systematization of pre-processed, SEM and FTIR spectral data of produced powders into an n-dimensional big data matrix suitable for machine learning. (M13-M19) • Development of the necessary modifications of analytical methods for the identification and quantification of the studied constituents in (un)treated wastewater samples at different stages of the treatment. (M15-M19) • Obtaining data of the changes in concentration levels of the organic markers at different stages and under different experimental parameters of water treatments. (M14-M19) **T4.2:** Characterization and systemization of raw data of in-situ analysis (M16-M18). L:NOVO, C:HOFITECH • Systemizing in-situ FTIR water monitoring into the required n-dimensional big data matrix form for machine learning and simulations. • Systemizing the measured physical parameters and the energy consumption raw data **T4.3:** Structuring the experimental data and spectra for all measured test scenarios of the test matrix into the n-dimensional big data matrix form for machine learning and simulation. (M15-M19) L:HOFITECH, C:NOVO.

WORKPACKAGE 5	
W3. WORK PACKAGE NAME (100 characters)	Big-Data processing via machine learning
W4. WORK PACKAGE SUMMARY (4.000 characters) Describe its objectives, explain the technical approach to the work, clearly state the starting point and expected results. What is the relationship between this work package and any preceding or subsequent ones?	
Objective: to develop self-learning, self-controlling and self-optimizing algorithms for the wastewater transformation technology by in-depth processing of the n-dimensional big data matrix using a machine learning approach. Processing multi-dimensional data matrixes of WP4 by data science tools and numerical simulation software comprising multiphysics, kinetic and chemical engines.	
W5. WORK PACKAGE START TIME The project starts at month 'zero' (project time elapsed = 0). After 4 weeks, the project time elapsed is = 1. After 24 weeks, the project has been running for 5 months 2 weeks (=5.5).	14
W6. DURATION OF WORK PACKAGE (# of months)	7 MONTHS
W7. MILESTONES AND OUTCOMES (2.000 characters) Describe the milestones and outcomes. State clearly what type of outcome is expected (document/blueprint/software/system/hardware/...) as well as when you expect to have completed it. For each you should: › Identify their place in the critical path of the overall project. › Indicate if it is a Go/No-go decision point – it may be that any failure cannot be overcome and the project may naturally come to a conclusion.	
WP5 M5 Machine learning algorithms based on solved n-dimensional big data matrix are completed. Programming verification M20 WP5. M2M6- Synergy in energy efficiency and toxicity reduction is proven by machine learning (GO-NO GO M- DATA QUALITY VALIDATED) M 20 **D5.1: Report on machine learning (M14)** - Report on the algorithm structure ensuring self-learning, self-controlling and predictive mechanisms for forecasting efficiency of the wastewater-to-product treatment mechanism **D5.2: Intelligent software package (M15)** - Complex software package ensuring self-learning, self-controlling and predictive mechanisms for forecasting efficiency, cost of wastewater treatment and yield of wastewater-to-powder transformation mechanism **D5.3: Innovation report (M16)** - Report on technological updates and improvements to the complex R&D setup for the development of the lab demonstrator utilizing a high-performance consumable scrap metal particulate bed **D.5.4 Validated energy efficiency** of the proposed parameter scenarios resulting from machine learning **(M20)**	
W8. TASKS (10.000 characters)	

You are now required to present a list of the tasks being undertaken within each work package. Describe the role, the activities and the responsibilities of each organization in each of these work packages. You should produce a list of tasks using the following template: › Task reference (WP1, task 1...) › Identify the organization performing the task (use the shortened names provided in P1). › Provide a general description of the task/activities.
T5.1: Development of machine learning algorithms and in-depth processing of data (M14-M20). L:HOFITECH, C:NOVO • Development of appropriate machine learning algorithms for finding correlations between controlled and determined parameters, energy efficiency increase and toxicity reduction in the n-dimensional big data matrix (M14-M20). • Development of a predictive algorithm for the time dependence of liquid and solid product concentration in treated wastewater on controlled technological parameters (M14-M20). Development of a self-learning/self-controlling software prototype for designing the demonstrator (M14-M20). **T5.2:** Specification of demonstrator attributes on the basis of operation experience and machine learning outputs of the results of WP2, WP3 and WP4 (M14-M20). L:NOVO, C:HOFITECH

WORKPACKAGE 6	
WP NUMBER AND NAME (100 characters)	V&V of demonstrator
WP WORK PACKAGE SUMMARY (4.000 characters) Describe its objectives, explain the technical approach to the work, clearly state the starting point and expected results. What is the relationship between this work package and any preceding or subsequent ones?	
The objective is to verify and validate complex data-driven demonstrator technology for transformation of wastewater and electrochemically dissolved metals to micropowder without formation of sludge.	
WP WORK PACKAGE START TIME The project starts at month 'zero' (project time elapsed = 0). After 4 weeks, the project time elapsed is = 1. After 24 weeks, the project has been running for 5 months 2 weeks (=5.5).	19
WP DURATION OF WORK PACKAGE (# of months)	7
WP MILESTONES AND OUTCOMES (2.000 characters) Describe the milestones and outcomes. State clearly what type of outcome is expected (document/blueprint/software/system/hardware/...) as well as when you expect to have completed it. For each you should: › Identify their place in the critical path of the overall project. › Indicate if it is a Go/No-go decision point – it may be that any failure cannot be overcome and the project may naturally come to a conclusion.	
WP6 M7. Lab demonstrator is completed and operational . (GO-NOGO M-HW/SW VALIDATED)-month 25	
WP TASKS (10.000 characters) You are now required to present a list of the tasks being undertaken within each work package. Describe the role, the activities and the responsibilities of each organization in each of these work packages. You should produce a list of tasks using the following template: › Task reference (WP1, task 1...) › Identify the organization performing the task (use the shortened names provided in P1).	

› Provide a general description of the task/activities.
T6.1: Validation and verification (V&V) of the demonstrator. (M19-M25).L:NOVO, C: AQP, HOFITECH. V&V of the selectivity and efficiency of the waste-to-product mechanisms with a redesigned and improved, upscaled, industrial capacity of the selected three wastewater samples to achieve the highest yield of micropowders at the minimum acceptable purity of treated water without the formation of conventional sludge, carbon footprint • V&V of the self-controlling and self-optimizing features of the lab demonstrator to achieve the highest yield of micropowders at the minimum acceptable purity of treated water without the formation of sludge, carbon footprint V&V of the cost-reduction features of the data driven self-optimized lab demonstrator technology utilizing a high-performance consumable scrap metal particulate bed

WORKPACKAGE 7	
WP WORK PACKAGE NAME (100 characters)	**Field testing of prototype**
WP WORK PACKAGE SUMMARY (4.000 characters) Describe its objectives, explain the technical approach to the work, clearly state the starting point and expected results. What is the relationship between this work package and any preceding or subsequent ones?	
AQUAPROFIT will identify and contact industrial partners for the field testing of the upscaled multi-chamber prototype primarily in the 50 km vicinity of the manufacturing and assembling site located in Pécs, Hungary and potentially on other sites mainly in the Transdanubian region of Hungary. After these partners are contacted and testing is ready to be scheduled, a testing plan will be created based on the results obtained during laboratory testing. This testing plan will contain a detailed time schedule including the time for setting up the technology as well as operating hours, a set of parameters to be assessed and a sampling plan that specifies the frequency and location of samples to be taken. Once the testing plan is agreed upon by the consortium and the industrial partner, the tests can be carried out. The developed equipment will be designed in a way that it fits inside a trailer or a small size shipping container, hence the transportation to the testing site can be done on road in a conventional way. During the testing phase there will be continuous consultation between AQUAPROFIT and HOFITECH regarding their reactor and between AQUAPROFIT and NOVOSRO about their inline monitoring system to have comprehensive testing results. In parallel with the above mentioned processes there will be market research done and further industrial partners will be contacted and attained.	
WP WORK PACKAGE START TIME The project starts at month 'zero' (project time elapsed = 0). After 4 weeks, the project time elapsed is = 1. After 24 weeks, the project has been running for 5 months 2 weeks (=5.5).	**25**
WP DURATION OF WORK PACKAGE (# of months)	**5**
WP MILESTONES AND OUTCOMES (2.000 characters) Describe the milestones and outcomes. State clearly what type of outcome is expected (document/blueprint/software/system/hardware/...) as well as when you expect to have completed it. For each you should: › Identify their place in the critical path of the overall project. › Indicate if it is a Go/No-go decision point – it may be that any failure cannot be overcome and the project may naturally come to a conclusion.	
WP 7 M8. Upscaled Lab demonstrator with demonstrable treatment&production capacity is validated and verified in relevant environment (GO/NO GO M-FUNCTIONAL PROTOTYPE) M29	
WP TASKS (10.000 characters)	

You are now required to present a list of the tasks being undertaken within each work package. Describe the role, the activities and the responsibilities of each organization in each of these work packages. You should produce a list of tasks using the following template: › Task reference (WP1, task 1...) › Identify the organization performing the task (use the shortened names provided in P1). › Provide a general description of the task/activities.
WP7.T1 AQUAPROFIT: Execution and management of field tests (M25-M29). L:AQP Utilising AQUAPROFIT's already existing wide customer base, potential industrial partners will be contacted for the purpose of industrial field testing. Once the final partners are identified and the details and conditions of the testing are discussed, a testing plan will be created. According to this plan, the tests will be carried out at the relevant sites where the equipment will be transported by vans. During the operation phase, parameters such as pressure, flow, temperature, water quality at predefined points, amount of produced ceramic powders and additional properties, that will be described in the testing plan, will be assessed. The raw and clean water quality analysis will be done by a certified laboratory. WP7.T2 AQUAPROFIT: Analysis of system operation parameters and consultation with HOFITECH and NOVOSRO, (M25-M29) L:AQP, C:NOVO, HOFITECH During the field tests the above-mentioned parameters will be continuously shared and discussed between the partners of the consortium, in order to ensure the full exploitation of the tests by having as comprehensive and detailed results as possible. WP7.T3 AQUAPROFIT: Contribution to market research and attaining industrial partners, (M25-M29) L:AQP AQUAPROFIT will actively reach out to potential industrial testing users, starting with already existing network and also contacting new industrial partners to provide the possibility of testing in various environments.

ANNEX C
Project Costs Breakdown

€	NOVOSRO	HOFITECH	AQUAPROFIT	PROJECT
PERSONNEL	182 400	172 800	187 600	542 800
OVERHEADS	59 680	54 920	41 520	156 120
TRAVEL	26 000	20 800	5 500	52 300
MATERIALS	0	68 000	6 500	74 500
OTHER	90 000	13 000	8 000	111 000
SUBCONTRACTING	15 000	29 500	15 000	59 500
TOTAL	**373 080**	**359 020**	**264 120**	**996 220**
Reimbursement rate	80%	80%	80%	n/a
GRANT	298 464	287 216	211 296	796 976
%	37,45%	36,04%	26,51%	100%

Príloha.4

KVANTIFIKOVATEĽNÉ VÝSLEDKY PROJEKTU

Príjemca: Novo s.r.o.
Cieľ sa uskutoční prostredníctvom týchto úloh:

Príjemca/člen konzorcia

Poradové číslo	Názov úlohy	Stručné predstavenie	Začiatok a koniec úlohy	Plánované náklady úlohy (spolufinancovania projektu z prostriedkov štátneho rozpočtu Slovenskej republiky (v eurách))	Dokument, ktorým je realizácia výsledku podložená	Kvantifikovateľný výsledok (počet)
T1.1.	Výskumné a vývojové aktivity pre návrh laboratórneho funkčného vzoru	Výskum a vývoj Laboratórneho funkčného vzoru a jeho technologických modulov: • Modul elektrochemického reaktora na transformáciu odpadových vôd pomocou kovového spotrebného materiálu; • Modul optického analyzátora pre in-situ monitorovanie kvality a zloženia vody • Vytvorenie zdieľaného úložiska na dátový manažment pre veľké data (big data) a vytvorenie vzdialeného prístupu ku všetkým modulom; • Optimalizácia veľkostí	05/2021 – 10/2022	169280,00 EUR	Progress report; Prezentácia Milestone č. 1.	2

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		dátových súborov optických spektier na spracovanie údajov v systéme neurónových sietí; • Optimalizácia infraštruktúry dedikovanej pre záznam meraných dát (logging) a monitorovacích modulov • Návrh a výroba digitálno-analógového prevodníka pre riadiace a logovacie moduly v rámci laboratórneho demonštrátora			
T1.2	Založenie a vybavenie spoločného testovacieho miesta pre testovanie prototypu na reálnych vzorkách odpadových vôd	Založenie a vybavenie spoločného testovacieho miesta pre testovanie prototypov v rôznych fázach vývoja na reálnych vzorkách odpadových vôd	05/2021/-09/2021	Progress report	1
T1.4	Montáž všetkých technologických modulov na spoločnom testovacom mieste	• Montáž všetkých modulov na spoločnom testovacom mieste • Preprava modulov . • Montáž všetkých optimalizovaných a novo vyvinutých modulov na spoločné testovacie	09/2021-10/2022	Progress report; Prezentácia Milestone č. 1.	2

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		miesto.				
T2.1	Organizačné povinnosti	• Organizovanie skupinových školení so zúčastnenými členmi na synchronizáciu a údržbu všetkých vyvinutých technologických modulov a komplexné nastavenie testovacích aktivít. • Transport produkovaných keramických práškov v zmysle plánu v testovacej matici. • Zaistenie optimálnych prevádzkových podmienok spoločného testovacieho miesta.	08/2022-06/2023	45840 EUR	Progress report; Prezentácia Milestone č. 2.	2
T2.2	Vykonanie testovacej matice, overovacie a validačné testy	• Koordinácia plánovaných experimentálnych kôl pre jednotlivé testovacie scenáre. • Meranie časového vývoja in-situ optických spektier a ďalších technologických deterministických parametrov odpadových vôd pri rôznych testovacích scenároch a parametroch. • Ex-situ analýza produkovaných mikroprášков metódami	08/2022-06/2023		Progress report; Prezentácia Milestone č. 2.	2

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		SEM a FTIR. • Záznam časového vývoja in situ COD, BOD, TOC parametrov a energetických parametrov upravenej vody pre každý testovací scenár • Manažment a klasifikácia nameraných dátových súborov na online úložisku				
T3.2	Príprava a revízia dokumentov týkajúcich sa jej technických povinností	Príprava a registrácia patentovej prihlášky	06/2021-10/2021	15600 EUR	Patentová prihláška	1
T4.2	Charakterizácia a systemizácia surových dát s in-situ analýzou	• Systematizácia dát in-situ optického monitorovania vody do požadovanej n-rozmernej formy veľkých dátových matíc pre strojové učenie a simulácie. • Systematizácia nameraných in-situ surových dát fyzikálnych parametrov a energetickej bilancie	06/2022-12/2022	33480 EUR	Progress report; Prezentácia Milestone č. 4.	2
T4.3	Štruktúrovanie experimentálnych údajov a optických spektier pre všetky scenáre	Štruktúrovanie experimentálnych údajov a optických spektier pre všetky scenáre testovacích bodov v testovacej matici	06/2022-12/2022		Progress report; Prezentácia Milestone č.4.	2

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	testovacích bodov v testovacej matici					
T5.1	Vývoj algoritmov strojového učenia (machine learning) a hĺbkové spracovanie meraných údajov pomocou machine learningu	• Vývoj vhodných algoritmov strojového učenia pre hľadanie korelácie medzi kontrolovanými a ovplyvnenými parametrami, zvýšením energetickej účinnosti a znížením toxicity vody pri spracovaní n-dimenzionálnych dátových matíc. • Vývoj prediktívneho algoritmu pre predpoveď časovej závislosti koncentrácie kvapalných a tuhých produktov v upravenej odpadovej vode pri kontrolovaných technologických parametroch. Vývoj prototypu softvéru pre samoučenie / samoregulovanie, ako pomôcku pri návrhe produktového demonštrátora.	07/2022-01/2023	30600 EUR	Progress report; Prezentácia Milestone č.5.	2
T5.2	Špecifikácia a optimalizácia parametrov demonštrátora na	Špecifikácia parametrov demonštrátora na základe prevádzkových skúseností a výstupu strojového	07/2022-01/2023		Progress report; Prezentácia Milestone č. 6.	2

	základe prevádzkových skúseností a výstupov/výsledkov strojového učenia	učenia výsledkov pracovných balíkov WP2, WP3 a WP4.				
T6.1	Validácia a verifikácia demonštrátora	• Validácia a verifikácia (V&V) selektivity a účinnosti mechanizmov transformácie nečistôt na produkt pomocou vylepšeného a optimalizovaného demonštrátora, ktorý bude testovaný v 3 typoch odpadových vôd so zvýšenou kapacitou čistenia. Cieľom je zvýšiť produkciu mikropráškov a znížiť mieru znečistenia vody na akceptovateľnú úroveň bez tvorby konvenčného kalu a uhlíkovej stopy. • V&V samoregulačných a samooptimalizujúcich funkcií demonštrátora pre zvýšenie produkcie mikropráškov a znížiť mieru znečistenia vody na akceptovatelnú úroveň bez tvorby konvenčného kalu a uhlíkovej stopy. • V&V recyklačnej technológie, ktorá	12/2022-06/2023	50440 EUR	Progress report; Prezentácia Milestone č. 7.	2

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		dosiahne zníženie nákladov pomocou strojového učenia a transformuje kovy na keramické prášky.				
T7.2	Analýza prevádzkových parametrov systému	Počas terénnych testov budú všetky prevádzkové parametre inteligentnej technológie nepretržite zdieľané a diskutované medzi konzorcionálnymi partnermi s cieľom získať najkomplexnejšie a najpodrobnejšie výsledky pre tvorbu produktu.	06/2023-10/2023	27840 EUR	Progress report; Prezentácia Milestone č. 8.	2