Destination 1: Biodiversity and ecosystem services

#	Felhívás azonosító jele	Felhívás Típusa	Felhívás neve	Felhívás keretösszege (EUR millió)	Felhívás beadásának tervezett ideje	Várható uniós hozzájárulás projektenként (EUR millió)	Várhatóan finanszírozandó projektek száma	Hány lépcsős a pályázat?	TRL szint	Pályázat kiírás linkje, egyéb információ
HORIZO	ON-CL6-2023-BIODIV-01-1	RIA	Better understanding of routes of exposure and toxicological and ecological impacts of chemical pollution on terrestrial biodiversity	22.00	28 Mar 2023	around 5.50	4	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-2	RIA	Impact of light and noise pollution on biodiversity	7.00	28 Mar 2023	around 3.50	2	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-3	RIA	Interdisciplinary assessment of changes affecting terrestrial and freshwater ecosystems, building on observation programmes	6.00	28 Mar 2023	around 6.00	1	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-4	RIA	Nature protection: Better methods and knowledge to improve the conservation status of EU-protected species and habitats	8.00	28 Mar 2023	around 4.00	2	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-5	RIA	Understanding and reducing bycatch of protected species	18.00	28 Mar 2023	around 9.00	2	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-6	IA	Restoration of deep-sea habitats	10.00	28 Mar 2023	around 10.00	1	1	Achieve TRL 5-6	
HORIZO	ON-CL6-2023-BIODIV-01-7	IA	Demonstration of marine and coastal infrastructures as hybrid blue-grey Nature-based Solutions	10.00	28 Mar 2023	around 5.00	2	1	Achieve TRL 5-7	
HORIZO	ON-CL6-2023-BIODIV-01-8	CSA	Addressing biodiversity decline and promoting Nature-based Solutions in higher education	3.00	28 Mar 2023	around 3.00	1	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-9	RIA	Biodiversity, economics and finance: unlocking financial flows towards reversing of biodiversity loss	5.00	28 Mar 2023	around 5.00	1	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-10	RIA	Build up of knowledge on Nature Positive Economy and supporting its scale-up	5.00	28 Mar 2023	around 5.00	1	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-11	RIA	Biodiversity loss and enhancing ecosystem services in urban and peri-urban areas	5.00	28 Mar 2023	around 5.00	1	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-12	CSA	Reinforcing science policy support with IPBES and IPCC for better interconnected biodiversity and climate policies	4.00	28 Mar 2023	around 4.00	1	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-13	RIA	Crop wild relatives for sustainable agriculture	12.00	28 Mar 2023	around 6.00	2	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-14	RIA	Biodiversity friendly practices in agriculture – breeding for Integrated Pest Management (IPM)	10.00	28 Mar 2023	around 5.00	2	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-15	CSA	Integrative forest management for multiple ecosystem services and enhanced biodiversity	7.00	28 Mar 2023	around 7.00	1	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-16	RIA	Valorisation of ecosystem services provided by legume crops	10.00	28 Mar 2023	around 5.00	2	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-17	RIA	Interlinkages between biodiversity loss and degradation of ecosystems and the emergence of zoonotic diseases	12.00	28 Mar 2023	around 4.00	3	1	-	
HORIZO	ON-CL6-2023-BIODIV-01-18	COFUND	Additional activities for the European Biodiversity Partnership: Biodiversa+	30.00	28 Mar 2023	around 60.00	1	1	-	

Destination 2: Fair, healthy and environment-friendly food systems from primary production to consumption

# Felhívás azonosító jele	Felhívás Típusa	Felhívás neve	Felhívás keretösszege (EUR millió)	Felhívás beadásának tervezett ideje	Várható uniós hozzájárulás projektenként (EUR millió)	Várhatóan finanszírozandó projektek száma	Hány lépcsős a pályázat?	TRL szint	Pályázat kiírás linkje, egyéb információ
HORIZON-CL6-2023-FARM2FORK-01-01	COFUND	European partnership on accelerating farming systems transition – agroecology living labs and research infrastructures	30.00	12 Apr 2023	around 60.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-02	COFUND	European partnership on animal health and welfare	20.00	12 Apr 2023	around 60.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-03	CSA	Improving yields in organic cropping systems	8.00	12 Apr 2023	around 4.00	2	1	-	
HORIZON-CL6-2023-FARM2FORK-01-04	CSA	Towards research and innovation beyond farm to fork strategy targets for pesticides after 2030		12 Apr 2023	around 1.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-05	RIA	Advancing vaccine development for African swine fever	12.00	12 Apr 2023	around 6.00	2	1	-	
HORIZON-CL6-2023-FARM2FORK-01-06	RIA	Towards sustainable livestock systems: European platform for evidence building and transitioning policy	5.00	12 Apr 2023	around 5.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-07	IA	Innovations in plant protection: alternatives to reduce the use of pesticides focusing on candidates for substitution	12.00	12 Apr 2023	around 6.00	2	1	Achieve TRL6-7	
HORIZON-CL6-2023-FARM2FORK-01-08	IA	Using automatic species recognition and artificial intelligence to fight illegal fish discards and revolutionise fisheries control	5.00	12 Apr 2023	around 5.00	1	1	Achieve TRL6-7	
HORIZON-CL6-2023-FARM2FORK-01-09	COFUND	European partnership on sustainable food systems for people, planet and climate	22.50	12 Apr 2023	around 45.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-10	RIA	Eradicate micronutrient deficiencies in the EU	9.00	12 Apr 2023	around 9.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-11	RIA	New detection methods on products derived from new genomic techniques for traceability, transparency and innovation in the food system	10.00	12 Apr 2023	around 5.00	2	1	Achieve TRL 4-5	
HORIZON-CL6-2023-FARM2FORK-01-12	CSA	Thematic network ensuring food safety by translating research and innovation into practice	2.00	12 Apr 2023	around 2.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-13	RIA	Cultured meat and cultured seafood – state of play and future prospects in the EU	7.00	12 Apr 2023	around 7.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-14	RIA	Providing marketing solutions to prevent and reduce the food waste related to marketing standards	10.00	12 Apr 2023	around 5.00	2	1	-	
HORIZON-CL6-2023-FARM2FORK-01-15	RIA	Fostering resilient European food systems in a changing world	8.00	12 Apr 2023	around 8.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-16	IA	Microbiomes fighting food waste through applicable solutions in food processing, packaging and shelf life	10.00	12 Apr 2023	around 5.00	2	1	Achieve TRL 6-7	
HORIZON-CL6-2023-FARM2FORK-01-17	CSA	EU-African Union cooperation – linking the activities of the Food and Nutrition Security and Sustainable Agriculture (FNSSA) partnership and those of the Pan-African Network for Economic Analysis of Policies (PANAP)	4.00	12 Apr 2023	around 4.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-18	CSA	Support for the implementation of a sustainable platform for the EU-African Union cooperation under the Food and Nutrition Security and Sustainable Agriculture (FNSSA) partnership	4.00	12 Apr 2023	around 4.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-19	IA	Support to the markets and trade of agroecological food products under the Food and Nutrition Security and Sustainable Agriculture (FNSSA) partnership	7.00	12 Apr 2023	around 7.00	1	1	-	
HORIZON-CL6-2023-FARM2FORK-01-20	RIA	EU-Africa Union – food safety	10.00	12 Apr 2023	around 5.00	2	1	-	

Destination 3: Circular economy and bioeconomy sectors

#	Felhívás azonosító jele	Felhívás Típusa	Felhívás neve	Felhívás keretösszege (EUR millió)	Felhívás beadásának tervezett ideje	Várható uniós hozzájárulás projektenként (EUR millió)	Várhatóan finanszírozandó projektek száma	Hány lépcsős a pályázat?	TRL szint	Pályázat kiírás linkje, egyéb információ
	HORIZON-CL6-2023-CircBio-01-01	CSA	Enhancing collaboration between Circular Cities and Regions Initiative's (CCRI) supporting organisations	2.50	28 Mar 2023	around 2.50	1	1	-	
	HORIZON-CL6-2023-CircBio-01-02	IA	One hundred circular model households: making European households sustainable through inclusive circular practices	18.00	28 Mar 2023	around 6.00	3	1	Achieve TRL 6-8	
	HORIZON-CL6-2023-CircBio-01-03	CSA	Harnessing the innovation potential and market uptake of successful circular economy water related projects	2.00	28 Mar 2023	around 2.00	1	1	-	
	HORIZON-CL6-2023-CircBio-01-04	RIA	Land-based bioprospecting and production of bioactive compounds and functional materials for multiple bio-based value chains	4.00	28 Mar 2023	around 4.00	1	1	Achieve TRL 3-5	
	HORIZON-CL6-2023-CircBio-01-05	IA	Broadening the spectrum of robust enzymes and microbial hosts in industrial biotechnology	10.00	28 Mar 2023	around 5.00	2	1	Achieve TRL 6-7	
	HORIZON-CL6-2023-CircBio-01-06	CSA	Bio-based solutions for humanitarian applications	3.00	28 Mar 2023	around 1.50	2	1	-	
	HORIZON-CL6-2023-CircBio-01-07	CSA	Symbiosis in the bio-based industrial ecosystems	3.00	28 Mar 2023	around 1.50	2	1	-	
	HORIZON-CL6-2023-CircBio-01-08	IA	Eco-friendly consumer products – low- toxicity/zero pollution construction bio- based materials	10.00	28 Mar 2023	around 5.00	2	1	Achieve TRL 6-8	
	HORIZON-CL6-2023-CircBio-01-09	RIA	Business models that balance the share of power and profit in the bioeconomy	8.00	28 Mar 2023	around 4.00	2	1	-	
	HORIZON-CL6-2023-CircBio-01-10	CSA	Supporting the fair and just transition from GHG-intensive economies facing challenges towards circular bioeconomy model regions	2.00	28 Mar 2023	around 2.00	1	1	-	
	HORIZON-CL6-2023-CircBio-01-11	RIA	Novel culturing of aquatic organisms for blue biotechnology applications	8.00	28 Mar 2023	around 4.00	2	1	Achieve TRL 3-5	
	HORIZON-CL6-2023-CircBio-01-12	RIA	Optimising the sustainable production of wood and non-wood products in small forest properties and development of new forest-based value chains	12.00	28 Mar 2023	around 6.00	2	1	-	
	HORIZON-CL6-2023-CircBio-01-13	RIA	Capturing market trends and societal perceptions for tailor-made forest services	12.00	28 Mar 2023	around 6.00	2	1	-	
	HORIZON-CL6-2023-CircBio-01-14	RIA	Monitoring the multi-functionality of European forests	4.00	28 Mar 2023	around 4.00	1	1	-	
	HORIZON-CL6-2023-CircBio-02-1-two- stage	IA	Circular Cities and Regions Initiative (CCRI)'s circular systemic solutions	58.00	28 Mar 2023 (First Stage), 26 Sep 2023 (Second Stage)	9.00-10.00	6	2	Achieve TRL 6-8	
	HORIZON-CL6-2023-CircBio-02-2-two- stage	IA	Novel, sustainable and circular bio-based textiles	14.00	28 Mar 2023 (First Stage), 26 Sep 2023 (Second Stage)	around 7.00	2	2	Achieve TRL 6-8	
	HORIZON-CL6-2023-CircBio-02-3-two- stage	RIA	Non-plant biomass feedstock for industrial applications: technologies and processes to convert non-lignocellulosic biomass and waste into bio-based chemicals, materials and products, improving the cascading valorisation of biomass		28 Mar 2023 (First Stage), 26 Sep 2023 (Second Stage)	around 4.00	2	2	Achieve TRL 5	

Destination 4: Clean environment and zero pollution

# Felhívás azonosító jele	Felhívás Típusa	Felhívás neve	Felhívás keretösszege (EUR millió)	Felhívás beadásának tervezett ideje	Várható uniós hozzájárulás projektenként (EUR millió)	Várhatóan finanszírozandó projektek száma	Hány lépcsős a pályázat?	TRL szint	Pályázat kiírás linkje, egyéb információ
HORIZON-CL6-2023-ZEROPOLLUTION-01-01	RIA	Knowledge and innovative solutions in agriculture for water availability and quality	6.00	28 Mar 2023	around 6.00	1	1	Achieve TRL 3-5	
HORIZON-CL6-2023-ZEROPOLLUTION-01-02	RIA	Integrated assessment and monitoring of emerging pollutants in the marine environment	12.50	28 Mar 2023	around 6.25	2	1	Achieve TRL 3-5	
HORIZON-CL6-2023-ZEROPOLLUTION-01-03	RIA	Tackling human and climate change induced pollution in the Arctic - building resilient socio-ecological systems	12.00	28 Mar 2023	aorund 6.00	2	1	Achieve TRL 3-5	
HORIZON-CL6-2023-ZEROPOLLUTION-01-04	RIA	Environmental sustainability and circularity criteria for industrial bio-based systems	8.00	28 Mar 2023	around 4.00	2	1	Achieve TRL 5	
HORIZON-CL6-2023-ZEROPOLLUTION-01-05	IA	Industrial biotechnology approaches for improved sustainability and output of industrial bio-based processes	10.00	28 Mar 2023	around 5.00	2	1	-	
HORIZON-CL6-2023-ZEROPOLLUTION-01-06	RIA	Biosensors and user-friendly diagnostic tools for environmental services	8.00	28 Mar 2023	around 4.00	2	1	Achieve TRL 3-5	
HORIZON-CL6-2023-ZEROPOLLUTION-01-07	RIA	Strategies to prevent and reduce plastic packaging pollution from the food system	8.00	28 Mar 2023	around 4.00	2	1	-	
HORIZON-CL6-2023-ZEROPOLLUTION-02-1-two-stage	RIA	Optimisation of manure use along the management chain to mitigate GHG emissions and minimize nutrients/contaminants dispersion in the environment	7.00	28 Mar 2023 (First Stage), 26 Sep 2023 (Second Stage)	around 7.00	1	2	-	
HORIZON-CL6-2023-ZEROPOLLUTION-02-2-two-stage	RIA	Safe-and-sustainable-by-design bio-based platform chemicals, additives, materials or products as alternatives	8.00	28 Mar 2023 (First Stage), 26 Sep 2023 (Second Stage)	around 4.00	2	2	Achieve TRL 4-5	

Destination 5: Land, ocean and water for climate action

#	Felhívás azonosító jele	Felhívás Típusa	Felhívás neve	Felhívás keretösszege (EUR millió)	Felhívás beadásának tervezett ideje	Várható uniós hozzájárulás projektenként (EUR millió)	Várhatóan finanszírozandó projektek száma	Hány lépcsős a pályázat?	TRL szint	Pályázat kiírás linkje, egyéb információ
	HORIZON-CL6-2023-CLIMATE-01-01	COFUND	Additional activities for the European Partnership Water Security for the Planet (Water4All)	18.00	12 Apr 2023	around 36.00	1	1	Achieve TRL 5	
	HORIZON-CL6-2023-CLIMATE-01-02	IA	Improve the reliability and effectiveness of alternative water resources supply systems and technologies	1	12 Apr 2023	around 3.30	3	1	-	
	HORIZON-CL6-2023-CLIMATE-01-03	RIA	Ocean and coastal waters carbon- and biodiversity-rich ecosystems and habitats in Europe and the Polar Regions	10.00	12 Apr 2023	around 5.00	2	1	Achieve TRL 2-4 (Option B)/Achieve TRL 3-5 (Option A)	
	HORIZON-CL6-2023-CLIMATE-01-04	RIA	Demonstration network on climate-smart farming – linking research stations	20.00	12 Apr 2023	around 20.00	1	1	-	
	HORIZON-CL6-2023-CLIMATE-01-05	CSA	Pilot network of climate-positive organic farms	5.00	12 Apr 2023	around 5.00	1	1	-	
	HORIZON-CL6-2023-CLIMATE-01-06	RIA	Analysing fossil-energy dependence in agriculture to increase resilience against input price fluctuations	5.00	12 Apr 2023	around 5.00	1	1	-	
	HORIZON-CL6-2023-CLIMATE-01-07	RIA	Enhancing the sustainable production of renewable energy at farm-level	5.00	12 Apr 2023	around 5.00	1	1	-	
	HORIZON-CL6-2023-CLIMATE-01-08	IA	Closing the research gaps on Essential Ocean Variables (EOVs) in support of global assessments	17.00	12 Apr 2023	5.00-6.00	3	1	Achieve TRL 5-6 (Option C)/Achieve TRL 7-8 (Option B)/Achieve TRL 7-8 (Option A)	

Destination 6: Resilient, inclusive, healthy and green rural, coastal and urban communities

#	Felhívás azonosító jele	Felhívás Típusa	Felhívás neve	Felhívás keretösszege (EUR millió)	Felhívás beadásának tervezett ideje	Várható uniós hozzájárulás projektenként (EUR millió)	Várhatóan finanszírozandó projektek száma	Hány lépcsős a pályázat?	TRL szint	Pályázat kiírás linkje, egyéb információ
	HORIZON-CL6-2023-COMMUNITIES-01-01	RIA	Enhancing social inclusion in rural areas: focus on people in a vulnerable situation and social economy	10.00	12 Apr 2023	around 5.00	2	1	-	
	HORIZON-CL6-2023-COMMUNITIES-01-02	IA	Improving rural future through better territorial governance and rural-urban synergies	11.00	12 Apr 2023	around 5.50	2	1	-	
	HORIZON-CL6-2023-COMMUNITIES-01-03	CSA	International benchmarking of rural and territorial policies and delivery mechanisms	3.00	12 Apr 2023	around 3.00	1	1	-	
	HORIZON-CL6-2023-COMMUNITIES-01-04	RIA	Investigating the contribution of geographical indications (GIs) to sustainable development and optimising support for newly established schemes	3.00	12 Apr 2023	around 3.00	1	1	-	
	HORIZON-CL6-2023-COMMUNITIES-01-05	RIA	Assessing urban farming impacts	5.00	12 Apr 2023	around 5.00	1	1	-	
	HORIZON-CL6-2023-COMMUNITIES-01-06	RIA	Inclusive and smart ways to communicate sustainability of food	6.50	12 Apr 2023	around 6.50	1	1	-	

Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal

Felhívás azonosító jele	Felhívás Típusa	Felhívás neve	Felhívás keretösszege (EUR millió)	Felhívás beadásának tervezett ideje	Várható uniós hozzájárulás projektenként (EUR millió)	Várhatóan finanszírozandó projektek száma	Hány lépcsős a pályázat?	TRL szint	Pályázat kiírás linkje, egyéb információ
HORIZON-CL6-2023-GOVERNANCE-01-01	COFUND	European partnership of Agriculture of Data	20.00	23 Mar 2023	around 40.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-02	RIA	Advancing analytical capacity and tools to support EU agri-food policies post 2027	6.00	23 Mar 2023	around 6.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-03	RIA	Towards CAP post 2027: evidence on nudging farmers to leverage more sustainable practices and behaviours	3.00	23 Mar 2023	around 3.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-04	RIA	Developing an interdisciplinary and inclusive pan-European academic network for food system science	6.00	23 Mar 2023	around 6.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-05	RIA	Revitalisation of European local (rural / peri-urban) communities with innovative bio-based business models and social innovation	5.00	23 Mar 2023	around 5.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-06	CSA	Co-creation and trust-building measures for biotechnology and bio-based innovation systems	1.50	23 Mar 2023	around 1.50	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-07	RIA	Integrated assessment of land use and biomass demands to contribute to a sustainable healthy and fair bioeconomy	4.00	23 Mar 2023	around 4.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-08	CSA	Mobilising BIOEAST networks for the development of national bioeconomy action programmes in support of the European Green Deal	3.50	23 Mar 2023	around 3.50	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-09	CSA	Coordination and supporting action to increase synergies in the dissemination and exploitation of climate observations by World Meteorological Organization and its affiliated bodies	2.00	23 Mar 2023	around 2.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-10	CSA	Support to EuroGEO initiative coordination/establishing a EuroGEO secretariat	2.00	23 Mar 2023	around 2.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-11	RIA	Reducing observation gaps in the land-sea interface area	9.00	23 Mar 2023	around 9.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-12	RIA	Empowering citizens to monitor, report and act in partnership with relevant public authorities to protect their environment in the context of environmental compliance assurance	1	23 Mar 2023	around 7.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-13	RIA	Open source solutions for edge, cloud and mixed model applications to strengthen production and administrative capacities in agriculture	10.00	23 Mar 2023	around 5.00	2	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-14	CSA	Digital and data technologies for livestock tracking	5.00	23 Mar 2023	around 5.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-15	RIA	Digitalisation in agriculture and forestry: markets for data, and digital technologies and infrastructure – state of play and foresight in a fast changing regulatory, trade and technical environment	5.00	23 Mar 2023	around 5.00	1	1	Achieve TRL 3-5	
HORIZON-CL6-2023-GOVERNANCE-01-16	RIA	Digital technologies supporting plant health early detection, territory surveillance and phytosanitary measures	10.00	23 Mar 2023	around 5.00	2	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-17	RIA	Data-driven solutions to foster industry's contribution to inclusive and sustainable food systems	8.00	23 Mar 2023	around 4.00	2	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-18	CSA	Broaden EIP Operational Group outcomes across borders by means of thematic networks to compile and share knowledge ready for practice	4.00	23 Mar 2023	around 2.00	2	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-19	CSA	Thematic networks to compile and share knowledge ready for practice	6.00	23 Mar 2023	around 3.00	2	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-20	CSA	Developing an EU advisory network on organic agriculture	5.00	23 Mar 2023	around 5.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-21	CSA	Developing EU advisory networks to reduce the use of pesticides	4.00	23 Mar 2023	around 4.00	1	1	-	
HORIZON-CL6-2023-GOVERNANCE-01-22	CSA	Developing EU advisory networks on the optimal fertiliser use	4.00	23 Mar 2023	around 4.00	1	1	-	